SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 - Product identifier

Trade BC EA4 2217 AF - ACTIVATOR

name/designation Chemical name

Product-type Mixture

- 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 BRADECHEM LTD, UNIT 1 THE BUSINESS VENUE, GRANDHOLM CRES, ABERDEEN, AB22 8AA SALES@BRADECHEM.COM +44(0)1224822227

1.4 - Emergency telephone number

+44(0)1224822227

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4	
Skin Corr. 1B	Skin corrosion, Category 1B	
Eye Dam. 1	Serious eye damage, Category 1	
Skin Sens. 1	Skin sensitization - Category 1	
STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)	
STOT SE 3 (H336)	STOT-single exposure - Category 3 (H336)	

2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains: butan-1-ol, n-butanol (CAS No.: 71-36-3)||2,2'-iminodiethylamine, diethylenetriamine (CAS No.: 111-40-0)||Epoxy resin (average mol. weight 700-1000) (CAS No.: 25036-25-3)

Signal word : Danger

Hazard pictograms





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Hazard statements

H302	Harmful if swallowed	
H314	Causes severe skin burns and eye damage	
H317	May cause an allergic skin reaction	
H335	May cause respiratory irritation	
H336	May cause drowsiness or dizziness	

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Precautionary statement	s		
P260	Do not breathe vapours.		
P261	Avoid breathing vapours.		
P264	Wash face, hands thoroughly after handling.		
P270	Do not eat, drink or smoke when using this product.		
P271	Use only outdoors or in a well-ventilated area.		
P272	Contaminated work clothing should not be allowed out of the workplace.		
P280	Wear protective gloves, protective clothing, eye protection, face protection, Face protection shield.		
P301+P312	If swallowed: Call a POISON CENTER if you feel unwell.		
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.		
P302+P352	IF ON SKIN: Wash with plenty of water and soap.		
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,		
	if present and easy to do. Continue rinsing.		
P310	Immediately call a POISON CENTER.		
P312	Call a a POISON CENTER if you feel unwell.		
P321	Specific treatment (see information on this label).		
P322	Specific measures (see information on this label).		
P330	Rinse mouth.		
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.		
P362+P364	Take off contaminated clothing and wash it before reuse.		
P363	Wash contaminated clothing before reuse.		
P403+P233	Store in a well-ventilated place. Keep container tightly closed.		
P405	Store locked up.		
P501	Dispose of container in an approved treatment center.		
EUH-phrases			
EUH208	Contains 2,2'-iminodiethylamine, diethylenetriamine (111-40-0) Epoxy resin		
	(average mol. weight 700-1000) (25036-25-3). May produce an allergic reaction		

2.3 - Other hazards

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
(CAS No. : 25036-25-3 Index No. : EC No. :	30-40	Skin Sens. 1 - H317	Not applicable

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butan-1-ol, n-butanol	CAS No. : 71-36-3 Index No. : 603-004-00-6 EC No. : 200-751-6		Acute Tox. 4 Oral - H302 Eye Dam. 1 - H318 Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 STOT SE 3 (H335) - H335 STOT SE 3 (H336) - H336	Not applicable
Chemical name	No	%	Class	Spec. concentrations
2,2'-iminodiethylamine, diethylenetriamine	CAS No. : 111-40-0 Index No. : 612-058-00-X EC No. : 203-865-4	5-10	Acute Tox. 4 Dermal - H312 Acute Tox. 4 Oral - H302 Skin Corr. 1B - H314 Skin Sens. 1 - H317	Not applicable

SECTION 4: First aid measures	
4.1 - Description of first aid measures	
Following inhalation	No special measures are necessary.Provide fresh air.
Following skin contact	 After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.
After eye contact	 In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
After ingestion	 If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Seek medical advice immediately. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours. Rinse mouth thoroughly with water.
	 - Medical treatment necessary. - When in doubt or if symptoms are observed, get medical advice.

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

 Symptoms and effects - Following inhalation
 - No information available.

 Symptoms and effects - Following skin contact
 - Causes skin irritation.

 Symptoms and effects - After eye contact
 - Serious eye damage/eye irritation

 Symptoms and effects - After ingestion
 - No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically. Antidotal dispensation.
- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media - ABC-powder

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- Carbon dioxide (CO2)

- Foam

- Extinguishing powder

Unsuitable extinguishing media

- Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture

- No information available.

5.3 - Advice for firefighters

- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.

For emergency responders

- No information available.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.
- Ensure waste is collected and contained.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- Soak up inert absorbent and dispose as waste requiring special attention.

Methods and material for cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Clear contaminated areas thoroughly.
- Take up carefully when dry.
- Clean contaminated articles and floor according to the environmental legislation.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation

- Avoid: Eye contact
- It is recommended to design all work processes always so that the following is excluded: Eye contact
- It is recommended to design all work processes always so that the following is excluded: Skin contact
- After use replace the closing cap immediately.
- Avoid exposure obtain special instructions before use.

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- Avoid: Skin contact - Wash contaminated clothing prior to re-use. - When using do not eat, drink, smoke, sniff. - Thorough skin-cleansing after handling the product. - Wash hands before breaks and after work.

7.2 - Conditions for safe storage, including any incompatibilities

- Store in a place accessible by authorized persons only.
- Keep away from: Food and feedingstuffs
- Only use containers specifically approved for the substance/product.
- Storage class Non-combustible substances of acute toxicity, category 1 and 2 / very toxic substances (liquid)
- Do not store together with: Food and feedingstuffs
- 7.3 Specific end use(s)

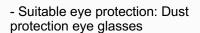
SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls		
Individual protection measures, such as personal		
protective equipment		

- No information available.
- Suitable eye protection: Eye glasses with side protection



- Suitable protective clothing: lab coat
- Suitable eye protection: Face protection umbrella
- Suitable protective clothing: Protective apron
- Tested protective gloves must be worn



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- For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Barrier creams are not substitutes for body protection.

Environmental exposure controls

- Further information: see technical data sheet.

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SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state	Liquid	Appearance	Liquid	
Colour	transparent	<u>Odour</u>		
Odour threshold		No data available		
рН		No data available		
Melting point		No data available		
Freezing point		No data available	No data available	
Boiling point		No data available		
Flash point		No data available		
Evaporation rate		No data available		
flammability		No data available		
Lower explosion limit		No data available	No data available	
Upper explosion limit		No data available	No data available	
Vapour pressure		No data available	No data available	
Vapour density		No data available	No data available	
Relative density		No data available	No data available	
Density		0.97 g/m3	0.97 g/m3	
Solubility (Water)		No data available	No data available	
Solubility (Ethanol)		No data available		
Solubility (Acetone)		No data available		
Solubility (Organic solvents)		No data available	No data available	
Log KOC		No data available	No data available	
Auto-ignition temperature		No data available		
Decomposition temperature		No data available	No data available	
Kinematic viscosity		No data available		
Dynamic viscosity		No data available		

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

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10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Acute toxicity (oral) - Category 4 - Harmful if swallowed

Toxicity: Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

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Toxicity: Substances

butan-1-ol, n-butanol (71-36-3)	
LD50 oral (rat)	790 mg/kg Liver:Fatty liver degeneration. Kidney, Ureter, Bladder:Other changes. Blood:Other changes.
LD50 dermal (rabbit) LC50 inhalation (rat)	3400 mg/kg 8000 ppmV 4 hours

Epoxy resin (average mol. weight 700-1000) (25036-25-3)		
LD50 oral (rat)	> 2000 mg/kg	
LD50 dermal (rat)	> 2000 mg/kg	

Skin corrosion/irritation

- Skin corrosion, Category 1B - Causes severe skin burns and eye damage

- Corrosive.

Serious eye damage/eye irritation

- Serious eye damage, Category 1

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⁻ No information available.

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- Risk of serious damage to eyes. - Causes serious eye irritation. - Corrosive. Respiratory or skin - Skin sensitization - Category 1 - May cause an allergic skin reaction sensitisation - May cause sensitization by skin contact. - May cause an allergic skin reaction. Germ cell mutagenicity - Not classified - Not classified Carcinogenicity Reproductive toxicity - Not classified - STOT-single exposure - Category 3 (H335) - May cause respiratory irritation STOT-single exposure - STOT-single exposure - Category 3 (H336) - May cause drowsiness or dizziness - data lacking - Not classified STOT-repeated exposure Aspiration hazard - Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity: Mixture

EC50 48 hr crustacea	No data available	
LC50 96 hr fish	No data available	
ErC50 algae	No data available	
ErC50 other aquatic plants	No data available	
NOEC chronic fish	No data available	
NOEC chronic crustacea	No data available	
NOEC chronic algae	No data available	
NOEC chronic other aquatic plants	No data available	

Toxicity: Substances

butan-1-ol, n-butanol (71-36-3)	
EC50 48 hr crustacea	1983 mg/l
LC50 96 hr fish	1840 mg/l

⁻ The substance/mixture does not fullfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oyxgen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

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12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

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- No indication of bioaccumulation potential.
- 12.4 Mobility in soil
- No information available.
- 12.5 Results of PBT and vPvB assessment
- 12.6 Other adverse effects
- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods - Dispose of waste according to applicable legislation.

- No information available. Sewage disposal

Special precautions for waste treatment - Waste for disposal is to be classified and labelled.

- Do not mix with other wastes.

- Consult the appropriate local waste disposal expert about waste disposal.

- Waste requires special monitoring.

- Collect the waste separately.

- Send to a hazardous waste incinerator facility under observation of official regulations.

- The waste is to be kept separate from other types of waste

until its disposal.

Community or national or regional provisions - No information available.

SECTION 14: Transport information

14.1 - UN number

UN number (ADR) UN1263 UN number (RID) UN1263 UN number (ADN) UN1263

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UN number (IMDG) UN1263 UN number (IATA) UN1263

14.2 - UN proper shipping name

UN proper shipping name

(ADR)

PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL

(including paint thinning and reducing compound) 640E

UN proper shipping name

PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL

(including paint thinning and reducing compound) 640E

UN proper shipping name

(ADN)

PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL

(including paint thinning and reducing compound) 640E

UN proper shipping name

(IMDG)

PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL

(including paint thinning and reducing compound) 640E

UN proper shipping name

(IATA)

PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish,

liquid filler and liquid lacguer base) or PAINT RELATED MATERIAL

(including paint thinning and reducing compound) 640E

14.3 - Transport hazard class(es)

ADR Transport hazard

class(es)

Pictograms

ADR Classification code:

F1

3

3

3

(RID)

Pictograms

Transport hazard class(es)

Transport hazard class(es)

(ADN)

Pictograms

Transport hazard class(es)

(IMDG)

Pictograms

3

Transport hazard class(es) 3

(IATA)

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Pictograms



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14.4 - Packing group

Packing group:IIIPacking group (RID):IIIPacking group (ADN):IIIPacking group (IMDG):IIIPacking group (IATA):III

14.5 - Environmental hazards

Environmental hazards : No Marine pollutant : No

14.6 - Special precautions for user

ADR

ADR Classification code: : F1
ADR Special provisions : 163+

640E+650+367

ADR Limited quantity (LQ) : 5 L
ADR Excepted quantities : E1

ADR Packing instructions : P001 IBC03 LP01 R001

ADR Special packing provisions : PP1
ADR Mixed packing provisions : MP19
Instructions for portable tanks and bulk containers : T2

<u>Special provisions for portable tanks and bulk containers</u> : TP1 TP29 ADR tank code : LGBF

ADR tanks special provisions

Vehicle for tank carriage:FLADR Transport category:3ADR Tunnel restriction code:D/E

ADR Special provisions loading, unloading and handling

<u>Special provisions - Packages</u> : V12

Special provisions - Bulk

<u>Special provisions - Operation</u> : S2 <u>ADR Hazard identification number (Kemler No.)</u> : 30

<u>RID</u>

Special provisions :

Limited quantity (LQ) :

Excepted quantities :

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ADN Special provisions Limited quantity (LQ) **Excepted quantities IMD**G Special provisions Limited quantity (LQ) **Excepted quantities** Packing instructions Special packing provisions IBC instruction(s) **IBC** provisions Instructions for portable tanks and bulk containers Special provisions for portable tanks and bulk containers EmS codes Stowage and handling Segregation Properties and observations **IATA** PCA - Excepted quantities PCA - Limited Quantity - Packing Instructions PCA - Limited Quantity - Maximum Net Quantity per Package PCA - Packing Instructions PCA - Maximum Net Quantity per Package **CAO - Packing Instructions** CAO - Maximum Net Quantity per Package **Special Provisions ERG Code** 14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

Substances REACH None candidates

Substances Annex XIV None Substances Annex XVII None

VOC content No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried information available. out for the product No

SECTION 16: Other information

SDS versions

12/13 10/10/2019 - English

Version : 1 Issue date : 10.10.2019

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Version	Issue date	Description of the amendments
1	10.10.2019	

Texts of the regulatory sentences

Moute taxisity (dermal) Category (
Acute toxicity (dermal) - Category 4		
Acute toxicity (oral) - Category 4		
Serious eye damage, Category 1		
Flammable liquid and vapour Category 3		
Flammable liquid and vapour		
Harmful if swallowed		
Harmful in contact with skin		
Causes severe skin burns and eye damage		
Causes skin irritation		
May cause an allergic skin reaction		
Causes serious eye damage		
May cause respiratory irritation		
May cause drowsiness or dizziness		
Skin corrosion, Category 1B		
Irritation, Category 2		
Skin sensitization - Category 1		
STOT-single exposure - Category 3 (H335)		
STOT-single exposure - Category 3 (H336)		

*** *** ***

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