SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the product

Identification of the mixture: ENCOR® 2341

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

Use of the Substance/Mixture : Dispersion for water based paint formulations.

1.3. Details of the supplier of the safety data sheet

Supplier

Arkema UK Ltd
Common Road, Stafford, ST16 3EH
United Kingdom
E-mail address : pars-drp-fds@arkema.com
http://www.arkema.com

1.4. Emergency telephone number

+ 33 1 49 00 77 77
European emergency phone number: 112
+44 20 3807 3798 (CHEMTREC UK - Emergency phone number)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008, as amended for Great Britain):

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2. Label elements

Label elements (REGULATION (EC) No 1272/2008, as amended for Great Britain):

Additional information:Store away from frost.

Special labelling:

EUH210 Safety data sheet available on request.
EUH208 May produce an allergic reaction. Contains: 3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixture with 2-methyl-3(2H)-isothiazolone.

2.3. Other hazards

Potential health effects:
Inhalation: At high temperature, products of thermal decomposition can be irritating to respiratory system
Skin contact: Risk of skin sensitization. Possible cross sensitization with other acrylates and methacrylates Direct contact with product : May cause skin irritation.
At high temperature, products of thermal decomposition can be irritating to skin
Eye contact: Direct contact with product : May cause eye irritation.
At high temperature, products of thermal decomposition can be irritating to eyes
Ingestion: Ingestion may cause irritation to mucous membranes.

Environmental Effects:
Inert polymer not biodegradable on the basis of its structure

Physical and chemical hazards:
Thermal decomposition giving toxic products.
Decomposition products: See chapter 10

Other:
Results of PBT and vPvB assessment : Based on the available information, it is not possible to conclude on PBT and vPvB criteria according to REACH regulation, annex XIII.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical nature of the mixture[1]:
Aqueous dispersion of vinylacetate copolymer.

Hazardous components (accordance with Annex II of Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758) :

Chemical name[1] & REACH Registration Number[2]	EC-No.	CAS-No.	Concentration	Classification REGULATION (EC) No 1272/2008, as amended for Great Britain
Bronopol (N° ANNEX: 603-085-00-8)	200-143-0	52-51-7	< 0,01 %	Acute Tox. 4 (Oral); H302 Acute Tox. 4 (Dermal); H312 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor Acute = 10 M-Factor Acute = 10
3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixture with 2-methyl-3(2H)-isothiazolone (N° ANNEX: 613-167-00-5)	–	55965-84-9	< 0,0015 %	Acute Tox. 3 (Oral); H301 Acute Tox. 2 (Inhalation); H330 Acute Tox. 2 (Dermal); H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor Acute = 100 M-Factor Chronic = 100 M-Factor Acute = 100 M-Factor Chronic = 100

[1]: See chapter 14 for Proper Shipping Name
[2] :See the text of the regulation for applicable exceptions or provisions -

SECTION 4: FIRST AID MEASURES

4.1. Description of necessary first-aid measures:

General advice:
Take off immediately all contaminated clothing. including shoes.

Inhalation:
Move patient from contaminated area to fresh air. In case of persistent problems : Consult a physician.

Skin contact:
Wash immediately, abundantly and thoroughly with soap and water. If skin irritation occurs, seek medical advice/attention.

Eye contact:
Wash open eyes immediately, abundantly and thoroughly for at least 15 minutes. Seek advice of an ophthalmologist if necessary.

Ingestion:
Do NOT induce vomiting. Consult a physician.

Protection of first-aiders:
Protective suit. In case of insufficient ventilation, wear suitable respiratory equipment.

4.2. Most important symptoms/effects, acute and delayed: No data available.

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

Treatment: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water spray, Water mist, powder, foam, Carbon dioxide (CO2)

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture:

In case of fire and/or explosion do not breathe fumes.
Formation of toxic products through combustion:, Carbon oxides

5.3. Advice for firefighters:

Specific methods:
Use water spray to cool unopened containers. Do not allow run-off from fire fighting to enter drains or water courses.

Special protective actions for fire-fighters:
In the event of fire, wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep away from heat and sources of ignition. Do not smoke. Avoid contact with the skin and the eyes. Avoid inhalation of vapours.

6.2. Environmental precautions:

Do not let product enter drains. Do not flush into surface water. Do not release into the environment. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up:

Methods for cleaning up:
After cleaning, flush away traces with water. Recover waste water for processing later.

Recovery:
Shovel into suitable container for disposal. Never return spills in original containers for re-use. Absorb the remainder with an inert absorbent material (sand, vermiculite, perlite).

Elimination: See chapter 13

6.4. Reference to other sections: None.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:
Storage and handling precautions applicable to products: Liquid. Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths. Provide electrical earthing of equipment.

Safe handling advice:
Remove all sources of ignition. In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures:
Take off immediately all contaminated clothing. Avoid contact with the skin and the eyes. Avoid inhalation of vapours. When using do not eat, drink or smoke.
Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a dry, cool and well-ventilated place. Store in original container. Keep container tightly closed. Keep away from heat and sources of ignition. Do not smoke. Provide electrical earthing of equipment. Avoid long storage period. Store away from frost.

Incompatible products:
Acids Strong oxidizing agents

Packaging material:
Recommended: Stainless steel, Polyethylene
To be avoided: Iron, Aluminium

7.3. Specific end use(s): None.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values Not relevant

Derived No Effect Level (DNEL):
This information is not required.

Predicted No Effect Concentration:
This information is not required.

8.2. Exposure controls:

Appropriate engineering controls: Frequently monitor and control the working atmosphere.
Provide appropriate exhaust ventilation at machinery.

Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.
In the case of hazardous fumes, wear self contained breathing apparatus.
Hand protection: Gloves (PVC, neoprene, nitrile rubber)
Eye/face protection: Safety glasses
Skin and body protection: Protective suit

Environmental exposure controls: See chapter 6

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	
Physical state (20°C):	liquid
Form:	aqueous dispersion
Colour:	white
Odour:	No data available.
Olfactory threshold:	No data available.
pH:	Concentration 100 %, Temperature 23 °C, pH 4 - 5 (ISO 976)
Melting point/range :	0 °C
Boiling point/boiling range :	100 °C
Flash point:	Not relevant
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Vapour pressure:	No data available.
Vapour density:	No data available.
Density:	1,04 g/cm3 (ISO 2811)
Water solubility:	miscible
Partition coefficient: n-octanol/water:	3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE : log Kow : -0,48 - 0,40 , at 24 °C (OECD Test Guideline 107)
Auto-ignition temperature:	No data available.
Decomposition temperature:	estimated > 180 °C
Viscosity, kinematic:	Not relevant
Viscosity, dynamic:	3.000 - 6.000 mPa.s , at 23 °C (ISO 2555)
Explosive properties:	
Explosivity:	Not relevant
Oxidizing properties:	Not relevant

9.2. Other information: None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: No data available.

10.2. Chemical stability:
The product is stable under normal handling and storage conditions.

10.3. Possibility of hazardous reactions:
None under normal conditions of use.

10.4. Conditions to avoid:
Store protected from moisture and heat. Store away from frost.

10.5. Incompatible materials to avoid:
Acids, Oxidizing agents

10.6. Hazardous decomposition products:

Thermal decomposition:
Decomposition temperature: estimated > 180 °C
Formation of toxic products through combustion:, Carbon oxides

SECTION 11: TOXICOLOGICAL INFORMATION

All available and relevant data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

11.1. Information on toxicological effects:

Acute toxicity:

Inhalation:
Inhalation of vapours due to thermal decomposition:, Risk of irritation of respiratory system, Toxic effects cannot be excluded

Ingestion: **According to its composition, can be considered as Slightly harmful by ingestion**

Dermal: **According to its composition, can be considered as Slightly harmful in contact with skin.**

Local effects (Corrosion / Irritation / Serious eye damage):

Skin contact: **According to its composition, can be considered as Slightly or not irritating to skin**

Eye contact: **According to its composition, can be considered as Slightly or not irritating to eyes**

Respiratory or skin sensitisation:

Inhalation: No data available.

Skin contact: **According to its composition : May cause an allergic skin reaction. Possible cross sensitization with other acrylates and methacrylates**
Presence of :

3(2H)-ISOTHIAZOLONE, 2-METHYL-ONE :
Strong skin sensitizer

1,2-BENZISOTHIAZOL-3(2H)-ONE :
• In animals : Weak sensitizing effects by skin contact. (Method: LLNA: Local Lymph Node Assay, Mouse)
Strong sensitizing effects by skin contact. (Method: OECD Test Guideline 406 Guinea pig maximization test) (80 %)
Not a skin sensitizer (Method: OECD Test Guideline 406 Buehler Test, Guinea pig) (82 %)
• In man : Skin allergy was observed.

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
• In man : Skin allergy was observed.
• In animals : Strong sensitizing effects by skin contact. (Method: OECD Test Guideline 429 LLNA: Local Lymph Node Assay, Mouse)
Skin sensitizer (Method: OECD Test Guideline 406 Buehler Test, Guinea pig)

CMR effects :

Mutagenicity: **Contains no ingredient listed as a mutagen**

Carcinogenicity: **According to its composition, this product should not be harmful in normal conditions of use**

Reproductive toxicity:

Fertility: **According to its composition, this product should not be harmful in normal conditions of use**

Foetal development: **According to its composition, this product should not be harmful in normal conditions of use**

Specific target organ toxicity :

Single exposure :

Inhalation: **Risk of irritation of respiratory system**

Repeated exposure: **According to its composition, this product should not be harmful in normal conditions of use**

Aspiration hazard:

Not applicable

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicology Assessment: All available and relevant data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

12.1. Toxicity :

Fish: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
LC50, 96 h (Oncorhynchus mykiss (rainbow trout)) : 0,19 mg/l (Method: US EPA)

Aquatic invertebrates: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
EC50, 48 h (Daphnia magna (Water flea)) : 0,16 mg/l (Method: US EPA)

Aquatic plants: **From its composition, it must be considered as: Harmful to algae.**

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
ErC50, 72 h (Skeletonema costatum (marine diatom)) : 0,0063 mg/l (Method: OECD Test Guideline 201)

Microorganisms:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
EC50, 3 h (Activated sludge) : 4,5 mg/l (Method: OECD Test Guideline 209, Respiration inhibition)

Sediment toxicity:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
NOEC, 28 d (Lumbriculus variegatus): 0,27 mg/kg dw (Method: OECD Test Guideline 225)

Aquatic toxicity / Long term toxicity:

Fish:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
NOEC, 36 d (Pimephales promelas (fathead minnow)) : 0,02 mg/l (Method: US EPA)

Aquatic invertebrates:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
NOEC, 21 d (Daphnia magna (Water flea)) : 0,1 mg/l (Method: Reported data)

Aquatic plants:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
NOEC r, 48 h (Skeletonema costatum) : 0,00049 mg/l (Method: OECD Test Guideline 201)

Non aquatic toxicity / Toxicity :

Toxicity to soil dwelling organisms:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
NOEC, 14 d (Eisenia fetida (earthworms)) : 8,8 mg/kg (Soil dw) (Method: OECD Test Guideline 207)
NOEC, 28 d (Microorganisms) : 0,4 mg/kg (Soil dw) (Method: OECD Test Guideline 216)

Earth dwelling non-mammal species:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
LC50, 8 d (Colinus virginianus (Bobwhite quail)) : 3.532 mg/kg (Method: US EPA)

Terrestrial plants:

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
NOEC, 21 d (Trifolium pratense (Red clover)) : 1.000 mg/kg (Method: OECD Test Guideline 208)
NOEC, 21 d (Brassica napus (Rapeseed)) : 1.000 mg/kg (Method: OECD Test Guideline 208)

12.2. Persistence and degradability :

Biodegradation (In water): **Based on the available information, it is not possible to conclude on biodegradability of this mixture.**

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
The 10 day time window criterion is not fulfilled.Not readily biodegradable.: 62 % after 28 d (Method: OECD Test Guideline 301 B)

12.3. Bioaccumulative potential :
Bioaccumulation: **Based on the available information, it is not possible to conclude on the bioaccumulation potential of this mixture.**

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
Partition coefficient: n-octanol/water: log Kow : -0,48 - 0,40 , at 24 °C (Method: OECD Test Guideline 107)

3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
Bioconcentration factor (BCF): 54 (28 d, 20 °C, Method: OECD Test Guideline 305 E, Lepomis macrochirus (Bluegill sunfish)

12.4. Mobility in soil - Distribution among environmental compartments:

Absorption / desorption:
3(2H)-ISOTHIAZOLONE, 5-CHLORO-2-METHYL-, MIXTURE WITH 2-METHYL-3(2H)-ISOTHIAZOLONE :
log Koc: 0,82 - 1 (Method: OECD Test Guideline 106)

12.5. Results of PBT and vPvB assessment :
Based on the available information, it is not possible to conclude on PBT and vPvB criteria according to REACH regulation, annex XIII.

12.6. Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

Disposal of product: The product should not be allowed to enter drains, water courses or the soil. Dispose of contents or container to an approved waste disposal plant. In accordance with local and national regulations.

Disposal of packaging: Recycle if possible.

SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: REGULATORY INFORMATION

Safety data sheets: accordance with Annex II of Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

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

Major Accident Hazard Legislation Not applicable

15.2. Chemical safety assessment:

This information is not required.

INVENTORIES:

European union/EEA:	In the event of purchase from an Arkema legal entity based in the European Economic Area (EEA), it is established that this product complies with the registration provisions of REACH Regulation (EC) No. 1907/2006, given that all of its components are excluded, exempted and / or registered. If purchasing from a legal entity established outside the EEA, please contact your local representative for more information.
TSCA (USA) :	The components of this product are all on the TSCA Inventory
NDSL (Canada) :	All components of this product are on the Canadian DSL
IECSC (CN):	All components of this product are listed or exempted
ENCS (JP):	Not all components of this product are listed or exempted
ISHL (JP):	Not all components of this product are listed or exempted
KECI (KR):	All components of this product are listed or exempted
PICCS (PH):	All components of this product are listed or exempted
NZIOC (NZ) :	All components of this product are listed or exempted
AIIC:	All components of this product are listed or exempted
TCSI:	Not all components of this product are listed or exempted

SECTION 16: OTHER INFORMATION

Full text of H, EUH-phrases referred to under sections 2 and 3

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Update:

Safety datasheet sections which have been updated:		Type:
2	other hazards	Additions
15	Inventories	Revisions
	REGULATION (UE) N°2020/878	Revisions

Thesaurus:
NOAEL : No Observed Adverse Effect Level (NOAEL)
LOAEL : Lowest Observed Adverse Effect Level (LOAEL)
bw : Body weight
food : oral feed
dw : Dry weight
vPvB : very Persistent and very Bioaccumulative
PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).