

SAFETY DATA SHEET FORMALDEHYDE SOLUTION

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

1.1. Product identifier

Product name FORMALDEHYDE SOLUTION

Product number 11297

Synonyms; trade names FORMALDEHYDE 37/8 S, FORMALDEHYDE 37% (8% METHANOL), FORMALIN,

METHANAL, FORMALDEHYDE/METHANOL 40/10, FORMALDEHYDE 36.6/7.3WW

40%WV, FORMALDEHYDE 30%, FORMALDEHYDE 36%, GENFOR 37, FORMALDEHYDE

37% SOLUTION, POLIFOR 37 D

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

Identified uses Chemical Intermediate Chemical Intermediate Polymerisation Initiator

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd

Aquarius House

6 Mid Point Business Park

Bradford BD3 7AY

+44 1274 267300 +44 1274 267306

SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 11297

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330 Skin Corr. 1B - H314 Eye Dam.

1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 STOT SE 2 - H371 STOT SE 3

- H335

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms







Signal word

Danger

Hazard statements H301+H311 Toxic if swallowed or in contact with skin.

H330 Fatal if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects.

H350 May cause cancer.

H371 May cause damage to organs . H335 May cause respiratory irritation.

Precautionary statements P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe vapour/ spray.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label

information

RCH002a Restricted to professional users.

Contains FORMALDEHYDE ...%, METHANOL

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

FORMALDEHYDE%		30-60)%
CAS number: 50-00-0	EC number: 200-001-8	REACH registration number: 01-2119488953-20-XXXX	
Classification			
Acute Tox. 3 - H301			
Acute Tox. 3 - H311			
Acute Tox. 2 - H330			
Skin Corr. 1B - H314			
Eye Dam. 1 - H318			
Skin Sens. 1 - H317			
Muta. 2 - H341			
Carc. 1B - H350			
STOT SE 3 - H335			

	METHANOL				
	CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44-XXXX		
	Classification				
l	Flam. Liq. 2 - H225				
l	Acute Tox. 3 - H301				
	Acute Tox. 3 - H311				
	Acute Tox. 3 - H331				
	STOT SE 1 - H370				

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The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air at once. Get medical attention.

Ingestion Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical

attention.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical

attention.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue

to rinse.

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

General information Suspected of causing genetic defects. May cause cancer. May cause damage to organs.

Inhalation Fatal if inhaled. May cause an asthma-like shortness of breath. May cause respiratory

irritation.

Ingestion Harmful if swallowed.

Skin contact Harmful in contact with skin. May cause an allergic skin reaction. Prolonged contact may

cause redness, irritation and dry skin. Causes severe burns.

Eye contact Causes severe burns.

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

Notes for the doctor
No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon.

5.3. Advice for firefighters

for firefighters

Special protective equipment

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation

of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the

Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with

plenty of water. Collect and place in suitable waste disposal containers and seal securely. For

waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and

eyes. Protect against direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a well-ventilated place. Store at temperatures

between 0°C and 20°C. Store away from the following materials: Organic peroxides/hydroperoxides. Flammable/combustible materials. Oxidising agents.

Storage class Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

FORMALDEHYDE ...%

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m³ Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m³

METHANOL

Sk

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³ Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk = Can be absorbed through the skin. WEL = Workplace Exposure Limit.

FORMALDEHYDE ...% (CAS: 50-00-0)

DNEL Workers - Dermal; Long term systemic effects: 240 mg/kg/day

Workers - Inhalation; Long term systemic effects: 9 mg/m³ Workers - Inhalation; Short term local effects: 0.75 mg/m³ Workers - Inhalation; Long term local effects: 0.375 mg/m³ Workers - Dermal; Long term local effects: 0.037 mg/m³ Consumer - Inhalation; Long term local effects: 0.1 mg/m³ Consumer - Dermal; Long term systemic effects: 102 mg/kg/day Consumer - Dermal; Long term local effects: 0.012 mg/m³ Consumer - Oral; Long term systemic effects: 4.1 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 3.2 mg/m³

PNEC - Fresh water; 0.47 mg/l

marine water; 0.47 mg/lIntermittent release; 4.7 mg/l

- Sediment; 2.44 mg/kg

- Sediment (Marinewater); 2.44 mg/kg

- Soil; 0.21 mg/kg - STP; 0.19 mg/l

METHANOL (CAS: 67-56-1)

DNEL Workers - Inhalation; Long term systemic effects: 130 mg/m³

Workers - Inhalation; Short term systemic effects: 130 mg/m³ Workers - Inhalation; Long term local effects: 130 mg/m³ Workers - Inhalation; Short term local effects: 130 mg/m³ Workers - Dermal; Long term systemic effects: 20 mg/m³ Workers - Dermal; Long term systemic effects: 20 mg/kg/day

General population - Inhalation; Long term systemic effects: 26 mg/m³ General population - Inhalation; Short term systemic effects: 26 mg/m³ General population - Inhalation; Long term local effects: 26 mg/m³ General population - Inhalation; Short term local effects: 26 mg/m³ General population - Dermal; Long term systemic effects: 5 mg/kg/day General population - Dermal; Short term systemic effects: 5 mg/kg/day General population - Oral; Long term systemic effects: 5 mg/kg/day General population - Oral; Short term systemic effects: 5 mg/kg/day

DMEL Workers - Dermal; Long term systemic effects: 40 mg/kg/day

PNEC - Fresh water; 20.8 mg/l

- marine water; 2.08 mg/l

- Intermittent release; 1540 mg/l

- STP; 100 mg/l

Sediment (Freshwater); 77 mg/kgSediment (Marinewater); 7.7 mg/kg

- Soil; 100 mg/kg

8.2. Exposure controls

Protective equipment







Eye/face protection

The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least > 8 hours. Nitrile rubber. Thickness: 0.38 mm Butyl rubber. Thickness: 0.3 mm To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body

protection

Wear rubber apron. Wear rubber footwear.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Particulate filter, type

P3. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Colourless.

Odour Characteristic.

pH (concentrated solution): 2.5 - 4.0

Melting point < -15°C

Initial boiling point and range 97°C

Flash point 66 - 73°C

Evaporation rate

No information available.

Evaporation factor

No information available.

Flammability (solid, gas)

No information available.

Upper/lower flammability or

explosive limits

Lower flammable/explosive limit: 7.0 % Upper flammable/explosive limit: 72 %

Other flammability No information available.

Vapour pressure 1.0 hPa @ 20°C

Vapour density 1.04

Relative density 1.07 - 1.13 @ 50°C

Bulk density No information available.

Soluble in water.

Partition coefficient log Pow: 0.35

Auto-ignition temperature 380°C

Decomposition TemperatureNo information available.Viscosity1.8 - 2.5 mPa s @ 25°C

Explosive properties No information available.

Explosive under the influence

of a flame

No information available.

Oxidising properties No information available.

9.2. Other information

Other information Not available.

Refractive index No information available.

Particle size No information available.

Molecular weight No information available.

Volatility No information available.

Saturation concentration No information available.

Critical temperature No information available.

Volatile organic compound No information available.

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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

Not available.

reactions

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition

Oxides of the following substances: Carbon.

products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD50

7,000.0

mg/kg)

Species Rat

ATE oral (mg/kg) 204.5

Acute toxicity - dermal

ATE dermal (mg/kg) 563.56

Acute toxicity - inhalation

ATE inhalation (gases ppm) 100.0

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes severe burns.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitroSuspected of causing genetic defects.

Carcinogenicity

Carcinogenicity May cause cancer.

Reproductive toxicity

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Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation. May cause damage to organs .

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Fatal if inhaled. May cause respiratory irritation. Vapour may irritate respiratory system/lungs.

Ingestion Toxic if swallowed.

Skin contact

Toxic in contact with skin. Causes severe burns. May cause sensitisation by skin contact.

Eye contact Causes severe burns.

Toxicological information on ingredients.

FORMALDEHYDE ...%

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

100.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 800 mg/kg, Oral, Rat

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 270.0

mg/kg)

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 270 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 270.0

Acute toxicity - inhalation

Acute toxicity inhalation

460.0

(LC₅₀ gases ppmV)

Species Rat

ATE inhalation (gases

ppm)

460.0

Skin corrosion/irritation

Animal data Corrosive: Rabbit

Serious eye damage/irritation

Serious eye

Corrosive 7 - 9 %, Eyes, Rabbit Not irritating. 2 %, Eyes, Rabbit

damage/irritation

Skin sensitisation

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Skin sensitisation Guinea pig: Sensitising.

Carcinogenicity

IARC carcinogenicity IARC Group 1 Carcinogenic to humans.

NTP carcinogenicity Known human carcinogen.

Reproductive toxicity

Reproductive toxicity -

Developmental toxicity: - NOAEC: 10 ppm, Inhalation, Rat

development

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 82 mg/kg, Oral, Rat

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Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC50 vapours mg/l)

3.0

3.0

Species Rat

ATE inhalation (vapours

mg/l)

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit

Serious eye damage/irritation

Serious eye

Not irritating. Rabbit

damage/irritation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Respiratory sensitisation

Genotoxicity - in vitroBacterial reverse mutation test: Negative. Gene mutation: Negative.

Genotoxicity - in vivo DNA damage and/or repair: Negative. Mouse

Carcinogenicity

Carcinogenicity NOAEL 466 mg/kg/day, Oral, Rat

Reproductive toxicity

Reproductive toxicity -

fertility

No information available.

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Reproductive toxicity -

development

Embryotoxicity: -:, Oral, Mouse Negative. Fetotoxicity: -:, Oral, Mouse Positive.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 1 - H370

Target organs Central nervous system Eyes

Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL 2340 mg/kg, Oral, Monkey NOAEL 1.06 mg/l, Inhalation, Rat 90 days

Target organs Eyes Central nervous system

Aspiration hazard

Aspiration hazard No information available.

.

Inhalation Toxic by inhalation. Drowsiness, dizziness, disorientation, vertigo.

Ingestion Toxic if swallowed. May cause unconsciousness, blindness and possibly death.

Skin contact Toxic in contact with skin.

Eye contact May cause temporary eye irritation.

Target organs Kidneys Liver Heart & cardiovascular system

Medical considerations Liver and/or kidney damage.

SECTION 12: Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or

frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

METHANOL

Ecotoxicity The product components are not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills can have

a harmful or damaging effect on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

FORMALDEHYDE ...%

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: <=0.1 mg/l, Fish

Acute toxicity - aquatic EC₅₀, 48 hours: 5.8 mg/l,

invertebrates OECD 202

Acute toxicity - aquatic EC₅₀, 72 hours: 3.48 mg/l, Scenedesmus subspicatus

plants OECD 201

Acute toxicity - EC₅₀, 120 hours: 34.1 mg/l,

microorganisms

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Chronic aquatic toxicity

Chronic toxicity - fish early NOEC, 28 days: > 47 mg/l, Oryzias latipes (Red killifish)

life stage

Chronic toxicity - aquatic NOEC, 21 days: 6.4 mg/l, Daphnia magna

invertebrates OECD 211

METHANOL

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)

NOEC, 200 hour: 15800 mg/l, Oryzias latipes (Red killifish)

LC₅₀, 96 hour: > 100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: > 10000 mg/l, Daphnia magna

EC₅₀, 96 hour: 22200 - 23400 mg/l, Freshwater invertebrates

Daphnia obtusa - Neonate

EC₅₀, 48 hour: 2500 mg/l, Marinewater invertebrates

Crangon Crangon (Common sand shrimp)

Acute toxicity - aquatic

plants

EC₅₀, 96 hours: 22000 mg/l, Selenastrum capricornutum

EC₅₀, 96 hour: 16.912 mg/l, Marinewater algae

Ulva pertusa

Chronic, NOEC, 96 hour: 9.96 mg/l, Marinewater algae

Ulva pertusa

Acute toxicity - IC_{50} , 15 hour: 20000 mg/l, microorganisms IC_{50} , 3 hour: > 1000 mg/l,

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Chemical oxygen demand 1.06 g O₂/g substance

Ecological information on ingredients.

FORMALDEHYDE ...%

Persistence and

degradability

The product is biodegradable.

Biodegradation - Degradation (%) 90: 28 days

METHANOL

Persistence and

degradability

The product is readily biodegradable.

Biodegradation Water - Degradation (%) 71.5: 5 days

Water - Degradation (%) 95: 20 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 0.35

Ecological information on ingredients.

FORMALDEHYDE ...%

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Bioaccumulative potential The product is not bioaccumulating. BCF: < 1,

Partition coefficient log Kow: -0.78

METHANOL

Bioaccumulative potential The product is not bioaccumulating. BCF: < 10, Leuciscus idus (Golden orfe)

Partition coefficient log Pow: -0.82 / -0.66

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

FORMALDEHYDE ...%

Mobility No data available.

METHANOL

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

Ecological information on ingredients.

METHANOL

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. assessment

12.6. Other adverse effects

Other adverse effects No information required.

Ecological information on ingredients.

METHANOL

Cod 1.42

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when

empty.

Disposal methodsDispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

SECTION 14: Transport information

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

14.1. UN number

UN No. (ADR/RID) 2209

UN No. (IMDG) 2209

UN No. (ICAO) 2209 UN No. (ADN) 2209

14.2. UN proper shipping name

Proper shipping name

FORMALDEHYDE SOLUTION

(ADR/RID)

Proper shipping name (IMDG) FORMALDEHYDE SOLUTION

Proper shipping name (ICAO) FORMALDEHYDE SOLUTION

Proper shipping name (ADN) FORMALDEHYDE SOLUTION

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C9

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

Transport labels



14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ICAO packing group III
ADN packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

EmS F-A, S-B

ADR transport category 3

Emergency Action Code •2X

Hazard Identification Number

(ADR/RID)

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

80

Transport in bulk according to No information required. **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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16

December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015. This product may impact SEVESO storage regulations.

Restrictions (Annex XVII Regulation 1907/2006)

This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3 Entry number: 28 Entry number: 69 Entry number: 72

Seveso Directive - Control of

H2 4120.2 1436

major accident hazards

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

CAS: Chemical Abstracts Service.

DNEL: Derived No Effect Level.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

Kow: Octanol-water partition coefficient.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅o: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail.

vPvB: Very Persistent and Very Bioaccumulative.

IARC: International Agency for Research on Cancer.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978.

cATpE: Converted Acute Toxicity Point Estimate.

BCF: Bioconcentration Factor.

BOD: Biochemical Oxygen Demand.

EC₅₀: 50% of maximal Effective Concentration.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration.

LOEC: Lowest Observed Effect Concentration.

DMEL: Derived Minimal Effect Level.

EL50: Exposure Limit 50

hPa: Hectopascal

LL50: Lethal Loading fifty

OECD: Organisation for Economic Co-operation and Development

POW: Octanol-water partition coefficient

SCBA: self-contained breathing apparatus

STP: Sewage Treatment Plant VOC: Volatile Organic Compounds

Classification abbreviations

and acronyms

Acute Tox. = Acute toxicity

Aquatic Acute = Hazardous to the aquatic environment (acute)

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and

sources for data

Supplier's information.

Classification procedures according to Regulation (EC) 1272/2008

Acute Tox. 3 - H301: Calculation method. Acute Tox. 3 - H311: Calculation method. Skin Corr. 1B - H314: Calculation method. Skin Sens. 1 - H317: Calculation method. Eye Dam. 1 - H318: Calculation method. Acute Tox. 2 - H330: Calculation method. STOT SE 3 - H335: Calculation method. Muta. 2 - H341: Calculation method. Carc. 1B - H350: Calculation method. STOT SE

2 - H371: Calculation method.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 04/03/2021

Version number 3.001

Supersedes date 08/02/2021

SDS number 10870

SDS status Approved.

Hazard statements in full H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled. H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs . H371 May cause damage to organs .

Signature Jitendra Panchal

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.