

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 22-Apr-2010 Revision Date 27-Jun-2025 Revision Number 6

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

1.1. Product identifier

Product Description: Potassium dichromate, 0.1N Standardized Solution

 Cat No. :
 35618

 Molecular Formula
 Cr2 K2 O7

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

Poison Centre - Emergency information services

Ireland: National Poisons Information Centre (NPIC) -

01 809 2166 (8am-10pm, 7 days a week)

Malta: +356 2395 2000 Cyprus: +357 2240 5611

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

Acute Inhalation Toxicity - Dusts and Mists

Respiratory Sensitization
Skin Sensitization
Category 1 (H334)
Category 1 (H317)
Germ Cell Mutagenicity
Carcinogenicity
Carcinogenicity
Category 1B (H340)
Category 1B (H350)
Category 1B (H360FD)

Environmental hazards

Chronic aquatic toxicity

Category 3 (H412)

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Danger

Hazard Statements

H317 - May cause an allergic skin reaction

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H340 - May cause genetic defects

H350 - May cause cancer

H360FD - May damage fertility. May damage the unborn child

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P201 - Obtain special instructions before use

P280 - Wear protective gloves

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P273 - Avoid release to the environment

Additional EU labelling

Restricted to professional users

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| Component | CAS No | EC No | Weight % | GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|-----------|-----------|-----------|------------|---|
| Water | 7732-18-5 | 231-791-2 | 99.5-99.75 | - |

Potassium dichromate, 0.1N Standardized Solution

Potassium dichromate 7778-50-9 EEC No. 231-906-6 0.25-0.5 Ox. Sol. 2 (H272) Acute Tox. 3 (H301) Acute Tox. 2 (H330) Acute Tox. 4 (H312) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Muta. 1B (H340) Carc. 1B (H350) Repr. 1B (H360FD) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

| Component | Specific concentration limits (SCL's) | M-Factor | Component notes |
|----------------------|---------------------------------------|----------|-----------------|
| Potassium dichromate | STOT SE 3 (H335) :: C>=5% | 1 | - |

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eve Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Do NOT induce vomiting. Call a physician or poison control center immediately. Ingestion

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth

> method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Revision Date 27-Jun-2025

Page 3/13

Immediate medical attention is required.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

No information available.

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

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Extinguishing media which must not be used for safety reasons

No information available.

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

5.2. Special hazards arising from the substance or mixture

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Hazardous Combustion Products

Chromium oxide, Potassium oxides.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.

6.2. Environmental precautions

Avoid release to the environment. See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Class 6.1D Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

| Component | The United Kingdom | European Union | Ireland |
|----------------------|--------------------------------------|----------------|---------|
| Potassium dichromate | STEL: 0.03 mg/m ³ 15 min | | |
| | STEL: 0.065 mg/m ³ 15 min | | |
| | TWA: 0.01 mg/m ³ 8 hr | | |
| | TWA: 0.025 mg/m ³ 8 hr | | |
| | Carc. as Cr | | |
| | Resp. Sens. | | |

Biological limit values

List source(s):

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Potassium dichromate 7778-50-9 (0.25-0.5) | DMEL = 0.01mg/m ³ | | DMEL = 0.01mg/m ³ | |

Predicted No Effect Concentration (PNEC)

See values below.

| Component | Fresh water | Fresh water | Water Intermittent | Microorganisms in | Soil (Agriculture) |
|------------------------|-------------|------------------|--------------------|-------------------|--------------------|
| | | sediment | | sewage treatment | |
| Potassium dichromate | PNEC = | PNEC = 0.15mg/kg | PNEC = | PNEC = 0.21mg/L | PNEC = |
| 7778-50-9 (0.25-0.5) | 0.00047mg/L | sediment dw | 0.00047mg/L | - | 0.035mg/kg soil dw |

| Component | Marine water | Marine water sediment | Marine water intermittent | Food chain | Air |
|------------------------|--------------|-----------------------|---------------------------|------------------|-----|
| Potassium dichromate | | PNEC = 0.15mg/kg | | PNEC = 17000g/kg | |
| 7778-50-9 (0.25-0.5) | | sediment dw | | food | |

8.2. Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

| Γ | Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|---|----------------|-------------------|-----------------|-------------|-----------------------|
| l | Natural rubber | See manufacturers | | EN 374 | (minimum requirement) |
| ı | Nitrile rubber | recommendations | | | |

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

Neoprene - PVC

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

100g/l aq. sol

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced **Recommended Filter type:** Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls Prevent product from entering drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance Orange Odor Odorless

Odor ThresholdNo data availableMelting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information available

Flammability (liquid)

No data available

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Flash Point Not applicable Method - No information available

Autoignition Temperature No data available Decomposition Temperature No data available

pH 3.6

Viscosity No data available

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor Pressure No data available

Density / Specific Gravity 1

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Potassium dichromate, 0.1N Standardized Solution

Molecular FormulaCr2 K2 O7Molecular Weight294.19

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Chromium oxide. Potassium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

Oral No data available

Dermal Based on available data, the classification criteria are not met

Inhalation Category 4 ATE = 18 mg/l

Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|----------------------|-------------------|---------------------|--------------------|
| Water | - | - | - |
| Potassium dichromate | 130 mg/kg (Rat) | 1150 mg/kg (Rabbit) | 0.09 mg/L/4h (Rat) |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory Category 1 **Skin** Category 1

May cause sensitization by inhalation and skin contact

(e) germ cell mutagenicity; Category 1B

ALFAA35618

Revision Date 27-Jun-2025

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

Mutagenic effects have occurred in humans

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | EU | UK | Germany | IARC |
|----------------------|--------------|----|---------|---------|
| Potassium dichromate | Carc Cat. 1B | | | Group 1 |

(g) reproductive toxicity; Category 1B **Reproductive Effects** May impair fertility.

Developmental Effects May cause harm to the unborn child.

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

No information available. **Target Organs**

No data available (j) aspiration hazard;

Symptoms / effects,both acute and No information available.

delayed

11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity **Ecotoxicity effects**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains. Do not allow material to contaminate ground water system. The product contains following substances which are hazardous for the

environment.

| Component | Freshwater Fish | Water Flea | Freshwater Algae |
|----------------------|-----------------------------------|--------------------|------------------|
| Potassium dichromate | LC50: 14 - 20.9 mg/L, 96h static | EC50: 1.4 mg/L 24h | |
| | (Pimephales promelas) | _ | |
| | LC50: 24.81 - 34.55 mg/L, 96h | | |
| | semi-static (Poecilia reticulata) | | |
| | LC50: 23 - 41.2 mg/L, 96h static | | |
| | (Poecilia reticulata) | | |
| | LC50: 15.41 - 30.36 mg/L, 96h | | |
| | flow-through (Pimephales | | |
| | promelas) | | |
| | LC50: > 139 mg/L, 96h static | | |
| | (Cyprinus carpio) | | |
| | LC50: 113.6 - 155.7 mg/L, 96h | | |
| | flow-through (Lepomis | | |
| | macrochirus) | | |
| | LC50: = 320 mg/L, 96h | | |
| | (Lepomis macrochirus) | | |
| | LC50: 65.6 - 137.6 mg/L, 96h | | |
| | static (Lepomis macrochirus) | | |
| | LC50: = 12.3 mg/L, 96h | | |
| | semi-static (Oncorhynchus | | |

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

| | mykiss) LC50: 21.209 - 30.046 mg/L, 96h semi-static (Oryzias latipes) | | |
|--|---|--|--|
|--|---|--|--|

| Component | Microtox | M-Factor |
|----------------------|----------|----------|
| Potassium dichromate | | 1 |

12.2. Persistence and degradability Product contains heavy metals. Discharge into the environment must be avoided. Special

pre-treatment is necessary

Persistence May persist, based on information available.

Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

12.3. Bioaccumulative potential May have some potential to bioaccumulate

12.4. Mobility in soil The product is water soluble, and may spread in water systems

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains. Do not let this

chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated

14.1. UN number

14.2. UN proper shipping name

Potassium dichromate, 0.1N Standardized Solution

d Solution Revision Date 27-Jun-2025

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|----------------------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Water | 7732-18-5 | 231-791-2 | ı | - | X | X | KE-35400 | X | - |
| Potassium dichromate | 7778-50-9 | 231-906-6 | - | - | X | Х | KE-29094 | X | X |

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|----------------------|-----------|------|---|-----|------|------|-------|-------|
| Water | 7732-18-5 | X | ACTIVE | X | - | X | X | Х |
| Potassium dichromate | 7778-50-9 | X | ACTIVE | Х | - | Х | Х | Х |

Legend: X - Listed '-' - Not Listed **KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|----------------------|-----------|--|--|--|
| Water | 7732-18-5 | - | - | - |
| Potassium dichromate | 7778-50-9 | Carcinogenic Category 1B, Mutagenic Category 1B, Toxic for reproduction Category 1B Article 57 Application date: March 21, 2016 Sunset date: September | Use restricted. See entry 72. (see link for restriction details) Use restricted. See entry 28. (see link for restriction | SVHC Candidate list - 231-906-6 - Carcinogenic, Article 57a; Mutagenic, Article 57b; Toxic for reproduction, Article 57c |

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

| | 21, 2017 | details) | |
|--|------------------|---------------------------|--|
| | Exemption - None | Use restricted. See entry | |
| | | 29. | |
| | | (see link for restriction | |
| | | details) | |
| | | Use restricted. See entry | |
| | | 30. | |
| | | (see link for restriction | |
| | | details) | |
| | | Use restricted. See entry | |
| | | 75. | |
| | | (see link for restriction | |
| | | details) | |
| | | Use restricted. See entry | |
| | | 47. | |
| | | (see link for restriction | |
| | | details) | |

REACH links

https://echa.europa.eu/authorisation-list

https://echa.europa.eu/substances-restricted-under-reach

https://echa.europa.eu/candidate-list-table

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

Seveso III Directive (2012/18/EC)

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|----------------------|-----------|---|--|
| Water | 7732-18-5 | Not applicable | Not applicable |
| Potassium dichromate | 7778-50-9 | Not applicable | Not applicable |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

Take note of Dir 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification Water endangering class = 3 (self classification)

| Component | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|----------------------|---------------------------------------|-------------------------|
| Potassium dichromate | WGK3 | |

| Component | France - INRS (Tables of occupational diseases) |
|---|---|
| Potassium dichromate Tableaux des maladies professionnelles (TMP) - RG 10,RG 10bis,RG 10ter | |

Revision Date 27-Jun-2025

| Component | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|--|--|---|--|
| Potassium dichromate Prohibited and Restricted | | | |
| 7778-50-9 (0.25-0.5) | Substances | | |

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H272 - May intensify fire; oxidizer

H301 - Toxic if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eve damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H330 - Fatal if inhaled

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H340 - May cause genetic defects

H350 - May cause cancer

H360FD - May damage fertility. May damage the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances **ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

Substances List

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data **Health Hazards** Calculation method

Potassium dichromate, 0.1N Standardized Solution

Revision Date 27-Jun-2025

Environmental hazards Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Prepared By Health, Safety and Environmental Department

Creation Date22-Apr-2010Revision Date27-Jun-2025Revision SummaryNot applicable.

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text

End of Safety Data Sheet