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

1.1 Product identifier

- Trade name: AUGEO® CLEAN MULTI
- Chemical name: Racemic mixture (+/-)-2,2-dimethyl-4-hydroxymethyl-1,3-dioxolane
- CAS-No.: 100-79-8

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

Uses of the Substance/Mixture

- Cleaning agent
- Waxes
- Stain removers and waxes removers
- Glass cleaner
- diluent and vehicle for fragrances

Remarks

- For professional and industrial installation and use only.

1.3 Details of the supplier of the safety data sheet

Local contact

SOLVAY UK HOLDING COMPANY LIMITED
Address: Solvay House, Baronet Road, Warrington, Cheshire, WA4 6HA, United Kingdom
Tel : +44 1923 204857

Company

Rhodia Brasil S.A.
Av. Maria Coelho de Aguiar, 215 Bloco B - 1º Andar - São Paulo - S.P.
CEP: 058404 - 902
Tel: (+55) 11 3741-7505

E-mail address

manager.sds@solvay.com

1.4 Emergency telephone number

+44(0)1235 239 670 [CareChem 24]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008, as retained and amended in GB law.

Eye irritation, Category 2	H319: Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008, as retained and amended in GB law.

Pictogram

Signal word

- Warning

Hazard statements

- H319 Causes serious eye irritation.

Precautionary statements

Prevention

- P264 Wash skin thoroughly after handling.
- P280 Wear eye protection/ face protection.

Response

- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.

2.3 Other hazards which do not result in classification

None known.

SECTION 3: Composition/information on ingredients

3.1 Substance

- Chemical name: Racemic mixture (+/-)-2,2-dimethyl-4-hydroxymethyl-1,3-dioxolane
- Synonyms: (+/-)-2,2-dimethyl-1,3-dioxolane-4-methanol, Isopropylidene glycerol
- Formula: C6H12O3

Information on Components and Impurities

Chemical name	Identification number	Classification according to Regulation (EC) No 1272/2008, as retained and amended in GB law.	Concentration [%]
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	CAS-No. : 100-79-8 EINECS-No. : 202-888-7	Eye irritation, Category 2 ; H319	>= 99 - <= 100

For the full text of the H-Statements mentioned in this Section, see Section 16.

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

- First aider needs to protect himself.
- Show this safety data sheet to the doctor in attendance.
- Place affected clothing in a sealed bag for subsequent decontamination.
- When symptoms persist or in all cases of doubt seek medical advice.

In case of inhalation

- Quickly move the person away from the contaminated area. Make the affected person rest.

- Obtain medical attention.

In case of skin contact

- Wash off immediately with plenty of water for at least 15 minutes.
- Use appropriate protective equipment when treating a contaminated person.
- In case of inflammation (redness, irritation, ...) obtain medical attention.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Keep eye wide open while rinsing.
- Always obtain medical advice, even if there are no symptoms.

In case of ingestion

- Do NOT induce vomiting.
- Obtain medical attention.
- Do not give anything to drink.

4.2 Most important symptoms and effects, both acute and delayed

Effects

- Chronic exposure may cause dermatitis.
- May cause irreversible eye damage.
- Loss of the eye

Symptoms

- Redness
- Swelling of tissue
- Causes skin burns.
- Lachrymation
- Conjunctivitis
- Causes eye burns.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- Burns must be treated by a physician.
- Contact a poison control center.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- Extinguishing media - small fires
- Water spray
- Multi-purpose powders
- Carbon dioxide (CO2)
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

- Extinguishing media - large fires
- Water spray
- Multi-purpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire.

- High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting

- Combustible liquid.

- The pressure in sealed containers can increase under the influence of heat.

- Hazardous decomposition products formed under fire conditions.
- High concentrations of toxic or harmful products may remain in the residual liquid once the fire has been extinguished.

- Under fire conditions:
- Will burn
- On combustion, toxic gases are released.

Hazardous combustion products:

- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for firefighters

- Wear full protective clothing and self-contained breathing apparatus.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.
- In the event of fire, wear self-contained breathing apparatus.
- For further information refer to section 8 "Exposure controls/personal protection".

Specific fire fighting methods

- Stay upwind.

- Fight fire with normal precautions from a reasonable distance.

- Do not use a solid water stream as it may scatter and spread fire.
- Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

- Cool containers/tanks with water spray.
- Do not use a solid water stream as it may scatter and spread fire.

Further information

- Evacuate personnel to safe areas.

- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.

- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.

- Wear as appropriate:
- Face-shield
- Tightly fitting safety goggles.

- In the case of dust or aerosol formation use respirator with an approved filter.
- In the case of vapour formation use a respirator with an approved filter.

- Eliminate all ignition sources if safe to do so.

- Stop leak if safe to do so.

- For further information refer to section 8 "Exposure controls/personal protection".

6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by bunding.
- The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and materials for containment and cleaning up

- No sparking tools should be used.

- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).

- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.

- Dispose of in accordance with local regulations.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.

- Wear personal protective equipment.
- Wear suitable protective clothing.

- Avoid inhalation, ingestion and contact with skin and eyes.

- Avoid splashes.
- Avoid formation of aerosol.

- For personal protection, see section 8.

- Containers must be bonded and grounded when pouring or transferring material.
- This material contains a flammable or combustible liquid and vapor.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.

- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

- Keep locked up or in an area accessible only to qualified or authorised persons.

- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer.

- Observe the general rules of industrial fire protection.
- Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material`s flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed. In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C.
- Keep away from sources of ignition - No smoking.

Packaging material

Suitable material
- Unlined steel
- Plastic container of HDPE

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Contains no substances with occupational exposure limit values above their regulatory reporting threshold.

8.2 Exposure controls

Control measures

Engineering measures
- Effective exhaust ventilation system.
- Ensure adequate ventilation.

- Extract at emission point.
- Ensure that extracted air cannot be returned to the workplace through the ventilation system.

- Avoid splashes.
- Avoid formation of aerosol.

Individual protection measures

Respiratory protection
- This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- Use a respirator with an approved filter if a risk assessment indicates this is necessary.
- Keep in a well-ventilated place.

Hand protection
- Where there is a risk of contact with hands, use appropriate gloves.
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

- The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Impervious gloves

Eye protection
- Tightly fitting safety goggles.
- Face-shield

- Chemical resistant goggles must be worn.
- Tightly fitting safety goggles.

Skin and body protection
- Full protective suit
- Footwear protecting against chemicals.

- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

- Impervious clothing
- Change working clothes after each workshift.
- Contaminated work clothing should not be allowed out of the workplace.

Hygiene measures
- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.

- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

Protective measures
- Emergency equipment immediately accessible, with instructions for use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.

- The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment.

Environmental exposure controls

- Dam up.
- Prevent product from entering sewage system.
- Try to prevent the material from entering drains or water courses.
- Local authorities should be advised if significant spillages cannot be contained.

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by bunding.
- The product should not be allowed to enter drains, water courses or the soil.

- Dispose of rinse water in accordance with local and national regulations.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	slight
Odour Threshold	No data available
Melting point/freezing point	Freezing point: -99 °C
Initial boiling point and boiling range	Boiling point/boiling range: 183 - 191 °C (1,013.25 hPa)
Flammability (solid, gas)	No data available
Flammability (liquids)	No data available
Flammability/Explosive limit	No data available
Flash point	91 °C closed cup 100 °C open cup
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	Not applicable
Viscosity	Viscosity, dynamic : 11 mPa.s (20 °C)
Solubility	Water solubility: (20 °C)completely soluble Solubility in other solvents: Alcohol: miscible Esters: miscible Ether: miscible Aromatic hydrocarbons: miscible petroleum ether.: miscible

	petrol: miscible
Partition coefficient: n-octanol/water	log Pow: 0.007
Vapour pressure	0.05 hPa (20 °C)
Density	1.0670 g/cm3 (20 °C)
Relative density	1.069 (20 °C)
Relative vapor density	2.6
Particle characteristics	No data available
Evaporation rate (Butylacetate = 1)	0.027

9.2 Other information

Self-ignition	390 °C (1,013 hPa) Method: EU Test Guideline A15
Surface tension	33.5 mN/m (20 °C)
Molecular weight	132.16 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable at normal ambient temperature and pressure.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

- Keep away from open flames, hot surfaces and sources of ignition.
- Avoid high temperatures.
- Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong acids
- On contact with acid releases:
- Acetone

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis) releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	LD50 : 7,000 mg/kg - Rat Not classified as hazardous for acute oral toxicity according to GHS. Published data

Acute inhalation toxicity

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	LC50 - 4 h (aerosol) : > 5.11 mg/l - Rat , male and female Method: OECD Test Guideline 403 Not classified as hazardous for acute inhalation toxicity according to GHS. No mortality observed at this concentration. Unpublished reports

Acute dermal toxicity

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	LD50 : > 2,000 mg/kg - Rat , male and female Method: OECD Test Guideline 402 Not classified as hazardous for acute dermal toxicity according to GHS. Semiocclusive No mortality observed at this dose. Unpublished reports

Acute toxicity (other routes of administration)	No data available

Skin corrosion/irritation

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Rabbit No skin irritation Method: OECD Test Guideline 404 Semiocclusive Unpublished reports

Serious eye damage/eye irritation

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Rabbit Causes serious eye irritation. Method: OECD Test Guideline 405 Unpublished reports

Respiratory or skin sensitisation

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Maximisation Test - Guinea pig Responding animals in GPMT < 30% Method: OECD Test Guideline 406 Unpublished reports

Mutagenicity

Genotoxicity in vitro

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Ames test with and without metabolic activation negative Method: OECD Test Guideline 471 Unpublished reports Gene mutation assays in mammalian cells. Strain: mouse lymphoma cells with and without metabolic activation negative Method: OECD Test Guideline 490 Unpublished reports

Genotoxicity in vivo

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	In vivo micronucleus test - Mouse male Intraperitoneal route Method: OECD Test Guideline 474 negative Unpublished reports
Carcinogenicity	No data available

Toxicity for reproduction and development

Toxicity to reproduction/Fertility

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Reproduction/developmental toxicity screening test - Rat, male and female, Oral General Toxicity - Parent NOAEL: 1,000 mg/kg bw/day Fertility NOEL: 1,000 mg/kg bw/day General Toxicity F1 NOEL: 1,000 mg/kg bw/day OECD Test Guideline 422 Gavage, Highest dose tested, no impairment of fertility has been observed, Unpublished reports One-Generation Reproduction Toxicity Study - Rat, male and female, Oral General Toxicity - Parent NOAEL: 1,000 mg/kg bw/day Fertility NOAEL Parent: 1,000 mg/kg bw/day General Toxicity F1 NOAEL: 1,000 mg/kg bw/day Fertility NOAEL F1: 1,000 mg/kg bw/day Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day General Toxicity F2 NOAEL: 1,000 mg/kg bw/day Developmental Toxicity NOAEL F2: 1,000 mg/kg bw/day OECD Test Guideline 443 Gavage, Highest dose tested, no impairment of fertility has been observed, Unpublished internal reports

Developmental Toxicity/Teratogenicity

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Pre-natal - Rat, male and female, Oral General Toxicity Maternal NOAEL: 1,000 mg/kg bw/day Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day Method: OECD Test Guideline 414 Gavage, Highest dose tested, no teratogenic effects have been observed, Unpublished reports Pre-natal - Rabbit, female, Oral General Toxicity Maternal NOAEL: 300 mg/kg bw/day Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day Method: OECD Test Guideline 414 Gavage, Highest dose tested, no teratogenic effects have been observed, Unpublished internal reports

STOT

STOT - single exposure

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	The substance or mixture is not classified as specific target organ toxicant, single exposure. Internal evaluation.

STOT - repeated exposure

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Internal evaluation.
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Oral 5 Weeks - Rat , male and female NOAEL: 1000 mg/kg Method: OECD Test Guideline 422 Gavage Highest dose tested No systemic toxicity observed. Unpublished reports Inhalation (aerosol) 90-day - Rat , male and female NOAEC: > 5 mg/l Method: OECD Test Guideline 413 Highest dose tested No significant adverse effects were reported Unpublished reports
Experience with human exposure	No data available
Aspiration toxicity	No data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	LC50 - 96 h : 16,700 mg/l - Pimephales promelas (fathead minnow) flow-through test Analytical monitoring: yes Method: according to a standardised method Not harmful to fish (LC/LL50 > 100 mg/L) Published data

Acute toxicity to daphnia and other aquatic invertebrates

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	EC50 - 48 h : > 96 mg/l - Daphnia magna (Water flea) static test Analytical monitoring: yes Method: OECD Test Guideline 202 Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L) Highest concentration tested Unpublished reports EC50 - 48 h : 4,600 mg/l - Daphnia magna (Water flea) static test Analytical monitoring: yes Method: OECD Test Guideline 202 Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L) Unpublished reports

Toxicity to aquatic plants

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	ErC50 - 72 h : > 92 mg/l - Pseudokirchneriella subcapitata (green algae) static test Analytical monitoring: yes End point: Growth rate Method: OECD Test Guideline 201 Not harmful to algae (EC/EL50 > 100 mg/L) Highest concentration tested Unpublished reports NOEC - 72 h : 92 mg/l - Pseudokirchneriella subcapitata (green algae) static test Analytical monitoring: yes End point: Growth rate Method: OECD Test Guideline 201 No adverse chronic effect observed up to and including the threshold of 1 mg/L. Highest concentration tested Unpublished reports ErC50 - 72 h : 15,000 mg/l - Raphidocelis subcapitata (freshwater green alga) static test End point: Growth rate Method: OECD Test Guideline 201 Not harmful to algae (EC/EL50 > 100 mg/L) Unpublished reports NOEC - 72 h : 940 mg/l - Raphidocelis subcapitata (freshwater green alga) static test End point: Growth rate Method: OECD Test Guideline 201 No adverse chronic effect observed up to and including the threshold of 1 mg/L. Unpublished reports

Toxicity to microorganisms

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	- 3 h : - activated sludge static test End point: Respiration inhibition EC50 : > 1,000 mg/l EC10 : > 1,000 mg/l Analytical monitoring: no Method: OECD Test Guideline 209 Unpublished reports
Chronic toxicity to fish	No data available

Chronic toxicity to daphnia and other aquatic invertebrates

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	NOEC: 10 mg/l - 21 Days - Daphnia magna (Water flea) semi-static test Analytical monitoring: yes End point: Reproduction Method: OECD Test Guideline 211 No adverse chronic effect observed up to and including the threshold of 1 mg/L. Unpublished reports

Terrestrial Compartment

Toxicity to soil dwelling organisms

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	NOEC: 250 mg/kg - 56 Days - Eisenia fetida (earthworms) End point: Reproduction Method: OECD Test Guideline 222 Unpublished reports

EC10: 1,250 mg/kg - 28 Days - soil micro-organisms
End point: Nitrogen transformation
Method: OECD Test Guideline 216
Unpublished reports

12.2 Persistence and degradability

Abiotic degradation

Stability in water

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	DT50: Hydrolysis pH: 4.0 Temperature of hydrolysis: 15 °C Hydrolysis time: 6.59 Days Temperature of hydrolysis: 20 °C Hydrolysis time: 3.51 Days Temperature of hydrolysis: 25 °C Hydrolysis time: 0.959 Days Method: OECD Test Guideline 111 Unpublished reports

Physical- and photo-chemical elimination — No data available

Biodegradation

Biodegradability

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Ready biodegradability study: Method: OECD Test Guideline 301 F 86.2 % - 28 Days The 10 day time window criterion is fulfilled. The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability Theoretical oxygen demand Inoculum: activated sludge Unpublished internal reports

Degradability assessment

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Bioconcentration factor (BCF) — No data available

12.4 Mobility in soil

Adsorption potential (Koc)

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Adsorption/Soil Log Koc: < 1.25 Method: OECD Test Guideline 121 Highly mobile in soils Unpublished reports

Known distribution to environmental compartments	No data available

12.5 Results of PBT and vPvB assessment

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Ecotoxicity assessment

Short-term (acute) aquatic hazard

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	Not harmful to aquatic life (LC/LL50, EC/EL50 > 100 mg/L)

Long-term (chronic) aquatic hazard

2,2-dimethyl-1,3-dioxolan-4-ylmethanol	No adverse chronic effect observed up to and including the threshold of 1 mg/L.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Prohibition

- Do not discharge directly into the environment.
- Dispose of in accordance with local regulations.
- The Company encourages the recycle, recovery and reuse of materials, where permitted. If disposal is necessary, The Company recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

Advice on cleaning and disposal of packaging

Prohibition

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.
- Empty remaining contents.
- Clean using steam.
- Monitor the residual vapours.
- Dispose of rinse water in accordance with local and national regulations.
- Containers that cannot be cleaned must be treated as waste.
- Dispose of contents/ container to an approved waste disposal plant.
- Dispose of in accordance with local regulations.
- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

SECTION 14: Transport information

ADN/ADNR
not regulated

ADR
not regulated

RID
not regulated

IMDG
not regulated

IATA
not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

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

UK REACH List of restrictions (Annex 17)
See the List of restrictions (Annex 17) of UK REACH for Conditions of restriction
Number on list: 3

Notification status

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.
EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA (""European" "Economic Area""), this product is compliant with the registration" provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
Korea. Act on Registration and Evaluation of Chemicals	- When purchased from a Solvay legal entity based in Korea, this product is compliant with "Act on Registration and

	Evaluation of Chemicals" (AREC or K-REACH, Article 10) as all its components are either excluded, exempt, and/or (pre)registered. When purchased from a legal entity outside of Korea, please contact your local representative for additional information.

15.2 Chemical safety assessment

- This safety data sheet does not constitute the user's own assessments of workplace risk as required by health and safety legislation.

SECTION 16: Other information

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

- H319: Causes serious eye irritation.

Key or legend to abbreviations and acronyms used in the safety data sheet

- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Instructions for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- GHS/CLP/SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

Further information

- Distribute new edition to clients

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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.