SAFETY DATA SHEET

Date of issue/Date of revision : 12 December 2018 **Version** : 1.01

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

1.1 Product identifier

Product name : BODYLINE PREMIUM SPRAY RED OXIDE 500 ML(BPSPRO)

Product code : BPSPRO

Other means of identification : Not available.

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

Product use : Industrial applications.

Use of the substance/ mixture : Coating.

1.3 Details of the supplier of the safety data sheet

PPG Industries (UK) Ltd.
Needham Rd,
Stowmarket,
Suffolk
IP14 2AD
UK
+44 (0) 1449 771775

- Technical contact : PPG Industries (UK) Ltd
- Tel : +44 (0) 1753 611543/611615/611685
- Fax : +44 (0) 1753 611632

e-mail address of person responsible for this SDS : EurMsdsContact@ppg.com

1.4 Emergency telephone number

Supplier

+44 (0) 1449 771775

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Aerosol 1, H222, H229
Eye Irrit. 2, H319
STOT SE 3, H336
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms :

Signal word : Danger

Hazard statements : Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Avoid breathing vapour. Do not pierce or burn, even after use.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal : Not applicable.

P280, P210, P211, P261, P251, P304 + P340, P305 + P351 + P338, P410, P412

Hazardous ingredients : acetone

Supplemental label elements : Repeated exposure may cause skin dryness or cracking.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	% by weight	Classification Regulation (EC) No. 1272/2008 [CLP]	Type

SECTION 3: Composition/information on ingredients

acetone	REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	≥25 - ≤50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥10 - <20	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥5.0 - ≤10	Flam. Liq. 3, H226	[2]
butane	EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥5.0 - ≤10	Flam. Gas 1, H220 Press. Gas (Comp.), H280	[2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥1.0 - <3.0	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤1.0	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) **See Section 16 for the full text of the H statements declared above.**	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern
[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

SECTION 4: First aid measures

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

Hazards from the substance or mixture : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
metal oxide/oxides

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Empty containers retain product residue and can be hazardous.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
acetone	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 3620 mg/m³ 15 minutes. STEL: 1500 ppm 15 minutes. TWA: 1210 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
n-butyl acetate	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 966 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m³ 8 hours. TWA: 150 ppm 8 hours.
2-methoxy-1-methylethyl acetate	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 548 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
butane	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 1810 mg/m³ 15 minutes. STEL: 750 ppm 15 minutes. TWA: 1450 mg/m³ 8 hours. TWA: 600 ppm 8 hours.
butan-1-ol	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 154 mg/m³ 15 minutes. STEL: 50 ppm 15 minutes.
propan-2-ol	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 1250 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m³ 8 hours. TWA: 400 ppm 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
acetone	DNEL	Long term Inhalation	1210 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	2420 mg/m³	Workers	Local
	DNEL	Long term Dermal	186 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	200 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	62 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	62 mg/kg bw/day	Consumers	Systemic
n-butyl acetate	DNEL	Long term Inhalation	480 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	960 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m³	Workers	Local
	DNEL	Short term Inhalation	960 mg/m³	Workers	Local
	DNEL	Long term Inhalation	102.34 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	859.7 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	102.34 mg/m³	Consumers	Local
	DNEL	Short term Inhalation	859.7 mg/m³	Consumers	Local
2-methoxy-1-methylethyl acetate	DNEL	Long term Inhalation	275 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	153.5 mg/kg	Workers	Systemic
	DNEL	Long term Oral	1.67 mg/kg	Consumers	Systemic
	DNEL	Long term Inhalation	33 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	54.8 mg/kg	Consumers	Systemic
butan-1-ol	DNEL	Long term Inhalation	310 mg/m³	Workers	Systemic
	DNEL	Long term Oral	3.125 mg/kg	Consumers	Systemic
	DNEL	Long term Inhalation	55 mg/m³	Consumers	Systemic
propan-2-ol	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	500 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	89 mg/m³	Consumers	Systemic
	DNEL	Long term Oral	26 mg/kg bw/day	Consumers	Systemic
trizinc bis(orthophosphate)	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Dermal	83 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	2.5 mg/m³	Consumers	Systemic
	DNEL	Long term Oral	0.83 mg/kg bw/day	Consumers	Systemic

PNECs

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
acetone	-	Fresh water	10.6 mg/l	Assessment Factors
	-	Marine water	1.06 mg/l	Assessment Factors
	-	Sewage Treatment Plant	100 mg/l	Assessment Factors
	-	Fresh water sediment	30.4 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	3.04 mg/kg dwt	Equilibrium Partitioning
	-	Soil	29.5 mg/kg dwt	Equilibrium Partitioning
n-butyl acetate	-	Fresh water	0.18 mg/l	-
	-	Marine water	0.018 mg/l	-
	-	Fresh water sediment	0.981 mg/kg	-
	-	Marine water sediment	0.0981 mg/kg	-
	-	Sewage Treatment Plant	35.6 mg/l	-
	-	Soil	0.0903 mg/kg	-
2-methoxy-1-methylethyl acetate	-	Fresh water	0.635 mg/l	-
	-	Marine water	0.0635 mg/l	-
	-	Fresh water sediment	3.29 mg/kg	-
	-	Marine water sediment	0.329 mg/kg	-
	-	Soil	0.29 mg/kg	-
	-	Sewage Treatment Plant	100 mg/l	-
butan-1-ol	-	Fresh water	0.082 mg/l	-
	-	Marine water	0.0082 mg/l	-
	-	Fresh water sediment	0.178 mg/kg	-
	-	Marine water sediment	0.0178 mg/kg	-
	-	Soil	0.015 mg/kg	-
	-	Sewage Treatment Plant	2476 mg/l	-
propan-2-ol	-	Fresh water	140.9 mg/l	Assessment Factors
	-	Marine water	140.9 mg/l	Assessment Factors
	-	Secondary Poisoning	160 mg/kg	-
	-	Fresh water sediment	552 mg/kg dwt	-
	-	Marine water sediment	552 mg/kg dwt	-
	-	Sewage Treatment Plant	2251 mg/l	Assessment Factors
	-	Soil	28 mg/kg dwt	-
trizinc bis(orthophosphate)	-	Fresh water	20.6 µg/l	Sensitivity Distribution
	-	Marine water	6.1 µg/l	Sensitivity Distribution
	-	Sewage Treatment Plant	100 µg/l	Assessment Factors
	-	Fresh water sediment	117.8 mg/kg dwt	Sensitivity Distribution
	-	Marine water sediment	56.5 mg/kg dwt	Equilibrium Partitioning
	-	Soil	35.6 mg/kg dwt	Sensitivity Distribution

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Chemical splash goggles. Use eye protection according to EN 166.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Recommended: neoprene, butyl rubber
May be used: polyvinyl alcohol (PVA), Viton®, Chloroprene, nitrile rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	Liquid.
Product type	:	Aerosol.
Colour	:	Not available.
Odour	:	Not available.
Odour threshold	:	Not available.
pH	:	insoluble in water.
Melting point/freezing point	:	May start to solidify at the following temperature: -66°C (-86.8°F) This is based on data for the following ingredient: 2-methoxy-1-methylethyl acetate. Weighted average: -91.67°C (-133°F)
Initial boiling point and boiling range	:	>37.78°C
Flash point	:	Closed cup: -80°C
Evaporation rate	:	Highest known value: 6.06 (acetone) Weighted average: 4.43compared with butyl acetate
Material supports combustion.	:	Yes.
Flammability (solid, gas)	:	liquid
Upper/lower flammability or explosive limits	:	Greatest known range: Lower: 2.2% Upper: 13% (acetone)
Vapour pressure	:	Highest known value: 24 kPa (180 mm Hg) (at 20°C) (acetone). Weighted average: 14.49 kPa (108.68 mm Hg) (at 20°C)
Vapour density	:	Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate). Weighted average: 2.83 (Air = 1)
Relative density	:	0.77
Solubility(ies)	:	Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	:	Not applicable.
Auto-ignition temperature	:	Lowest known value: 333°C (631.4°F) (2-methoxy-1-methylethyl acetate).
Decomposition temperature	:	Stable under recommended storage and handling conditions (see Section 7).
Viscosity	:	Kinematic (40°C): >0.21 cm^2/s
Explosive properties	:	Not available.
Oxidising properties	:	Product does not present an oxidizing hazard.

9.2 Other information

Aerosol product

Type of aerosol	:	Spray
Heat of combustion	:	27.54 kJ/g

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	The product is stable.
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids, amines.

10.6 Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
acetone	LC50 Inhalation Vapour	Rat	76000 mg/m³	4 hours
	LD50 Dermal	Rabbit	15.8 g/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
butane	LC50 Inhalation Vapour	Rat	658000 mg/m³	4 hours
isobutane	LC50 Inhalation Vapour	Rat	658000 mg/m³	4 hours
butan-1-ol	LC50 Inhalation Vapour	Rat	24000 mg/m³	4 hours
	LC50 Inhalation Vapour	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
propan-2-ol	LC50 Inhalation Vapour	Rat	72600 mg/m³	4 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	4.396 g/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Acute toxicity estimates

Route	ATE value
Oral	31600 mg/kg

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitisation

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

SECTION 11: Toxicological information

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
acetone	Category 3	Not applicable.	Narcotic effects
n-butyl acetate	Category 3	Not applicable.	Narcotic effects
butan-1-ol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
propan-2-ol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Ingestion : Can cause central nervous system (CNS) depression.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Ingestion : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

SECTION 11: Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.
Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.
If splashed in the eyes, the liquid may cause irritation and reversible damage.
Ingestion may cause nausea, diarrhea and vomiting.
This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-methoxy-1-methylethyl acetate	Acute LC50 161 mg/l Fresh water	Fish	96 hours
propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
trizinc bis(orthophosphate)	Acute LC50 0.112 mg/l Chronic NOEC 0.026 mg/l	Fish Fish	96 hours 30 days

Conclusion/Summary : There are no data available on the mixture itself.

12.2 Persistence and degradability

Conclusion/Summary : There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
acetone	-	-	Readily

SECTION 12: Ecological information

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
acetone	-0.24	3	low
n-butyl acetate	1.78	-	low
propane	2.36	-	low
2-methoxy-1-methylethyl acetate	0.56	-	low
butane	2.89	-	low
isobutane	2.8	-	low
butan-1-ol	0.88	-	low
propan-2-ol	0.05	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1950	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
14.3 Transport hazard class(es)	2	2	2.1	2.1
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID : None identified.

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

IMDG : None identified.

IATA : None identified.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

SECTION 15: Regulatory information

Aerosol dispensers :

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Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Product/ingredient name	List name	Name on list	Classification	Notes
butane	UK Occupational Exposure Limits EH40 - WEL	butane	Carc.	-

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
PBT = Persistent, Bioaccumulative and Toxic
vPvB = Very Persistent and Very Bioaccumulative
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
IMDG = International Maritime Dangerous Goods
IATA = International Air Transport Association

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aerosol 1, H222, H229	On basis of test data
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

SECTION 16: Other information

H220	Extremely flammable gas.
H222, H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Aerosol 1, H222, H229	AEROSOLS - Category 1
Aquatic Acute 1, H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Gas 1, H220	FLAMMABLE GASES - Category 1
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Press. Gas (Comp.), H280	GASES UNDER PRESSURE - Compressed gas
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

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