Safety Data Sheet

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

1.1 Product identifier

Product name : 222 AEROSOL Pb FREE

Product code : 0000C0218

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

Intended use: See Technical Data Sheet.
For professional use only.

Application methods: See Technical Data Sheet.

1.3 Details of the supplier of the safety data sheet

F H Brundle
Lamson Road
Ferry Lane North
Rainham
RM13 9YY
UK

Telephone number +44 (0) 1708 253545

Fax no +44 (0) 1708 253550

1.4 Emergency telephone number

Supplier

Telephone number : +44 (0) 1282 834545

Hours of operation : Mon-Fri 08:30-16:30 Web: www.fhbrundle.co.uk

Official Advisory Body Telephone No.:+44 (0)207 635 9191
Advice for Doctors and Hospitals

National advisory body/Poison Centre

Telephone number :

e-mail address of person responsible for this SDS : uk.marketingservices@akzonobel.com

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]

Flam. Aerosol 1, H222
Skin Irrit. 2, H315
Eye Irrit. 2, H319

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

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : F+; R12
R67

Physical/chemical hazards : Extremely flammable.

Human health hazards : Vapours may cause drowsiness and dizziness.

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

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

2.2 Label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Extremely flammable aerosol.
Causes serious eye irritation.
Causes skin irritation.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use.

Response : 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.

Hazardous ingredients : propan-2-ol
xylene

Supplemental label elements : Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

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 : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification 67/548/EEC	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
dimethyl ether	EC: 204-065-8 CAS: 115-10-6 Index: 603-019-00-8	>=25 - <35	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
propan-2-ol	EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	>=15 - <20	F; R11 Xi; R36 R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 (Narcotic effects)	[1] [2]
Benzene, dimethyl-	EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	>=10 - <12.5	R10 Xn; R20/21, R65 Xi; R37/38	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 (Respiratory tract irritation) Asp. Tox. 1, H304	[1] [2]
2-methoxy-1-methylethyl acetate	EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	>=5 - <10	R10	Flam. Liq. 3, H226	[2]
ethylbenzene	EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	>=1 - <3	F; R11 Xn; R20, R48/20, R65 Xi; R36/37/38	Flam. Liq. 2, H225 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]

			See Section 16 for the full text of the R-phrases declared above.	STOT SE 3, H335 (Respiratory tract irritation) STOT RE 2, H373 Asp. Tox. 1, H304 **See Section 16 for the full text of the H statements declared above.**	

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

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.

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. 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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards 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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO_2, powders, water spray.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

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 : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up : 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 (see Section 13). Preferably clean with a detergent. Avoid using solvents.

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 : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.
Operators should wear antistatic footwear and clothing and floors should be of the conducting type.
Keep away from heat, sparks and flame. No sparking tools should be used.
Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
Put on appropriate personal protective equipment (see Section 8).
Never use pressure to empty. Container is not a pressure vessel.
Always keep in containers made from the same material as the original one.
Comply with the health and safety at work laws.
Do not allow to enter drains or watercourses.
Information on fire and explosion protection
Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.
Notes on joint storage
Keep away from: oxidising agents, strong alkalis, strong acids.
Additional information on storage conditions
Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso II Directive - Reporting thresholds (in tonnes)

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P3a: Flammable aerosols containing flammable gases or flammable liquids	150	500
C8: Extremely flammable (R12 or any flammable maintained at temperature > boiling point)	10	50

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker or exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
dimethyl ether	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 958 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 400 ppm 8 hours. TWA: 766 mg/m³ 8 hours.
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.
xylene	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 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.
ethylbenzene	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m³ 8 hours.

	TWA: 100 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/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

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 : Use safety eyewear designed to protect against splash of liquids.

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

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

Recommended: polyvinyl alcohol (PVA), Viton®
May be used: butyl rubber
Not recommended: nitrile rubber, neoprene, PVC, natural rubber (latex)

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.

Body protection : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

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 : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Environmental exposure controls : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Odour	:	Solvent. [Strong]
Odour threshold	:	Not available.
pH	:	Not available.
Melting point/freezing point	:	Not available.
Initial boiling point and boiling range	:	Not available.
Flash point	:	Closed cup: -40°C
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Upper/lower flammability or explosive limits	:	Not available.
Vapour pressure	:	Not available.
Vapour density	:	Not available.
Relative density	:	0.86
Solubility(ies)	:	Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.

Viscosity : Kinematic (room temperature): 1 cm^2/s (100 cSt)

9.2 Other information

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 : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

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

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

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards 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.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dimethyl ether	LC50 Inhalation Gas.	Rat - Male	164000 ppm	4 hours
propan-2-ol	LC50 Inhalation Vapour	Rat - Male, Female	>26.5 mg/l	6 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5840 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat - Male	29.7 mg/l	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat - Male	3523 mg/kg	-
2-methoxy-1-methylethyl acetate	LC50 Inhalation Vapour	Rat - Male	>25.3 mg/l	6 hours
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-
	LD50 Oral	Rat - Male, Female	6190 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.4 mg/l	4 hours
	LD50 Dermal	Rabbit - Male	15400 mg/kg	-
	LD50 Oral	Rat - Male, Female	3500 mg/kg	-

: Not available.

Acute toxicity estimates

Route	ATE value
Dermal	9006.8 mg/kg
Inhalation (vapours)	80.33 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
propan-2-ol	Eyes - Irritant	Rabbit	-	-	-
xylene	Skin - Moderate irritant	Rabbit	-	-	-
	Eyes - Moderate irritant	Rabbit	-	-	-
ethylbenzene	Skin - Moderate irritant	Rabbit	-	-	-
	Eyes - Mild irritant	Rabbit	-	-	-

Conclusion/Summary **:** Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
propan-2-ol	skin	Guinea pig	Not sensitizing
2-methoxy-1-methylethyl acetate	skin	Guinea pig	Not sensitizing

Conclusion/Summary **:** Not available.

Mutagenicity

Conclusion/Summary **:** Not available.

Carcinogenicity

Conclusion/Summary **:** Not available.

Reproductive toxicity

Conclusion/Summary **:** Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	Not applicable.	Narcotic effects
Benzene, dimethyl-	Category 3	Not applicable.	Respiratory tract irritation
ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	Not determined

Aspiration hazard

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

Product/ingredient name	Result	Species	Exposure
dimethyl ether	Acute EC50 >4400 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 >4100 mg/l Fresh water	Fish - Poecilia reticulata	96 hours
propan-2-ol	Acute LC50 >10000 mg/l Fresh water	Daphnia - Daphnia magna	24 hours
	Acute LC50 9640 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1800 mg/l Fresh water	Algae - Scenedesmus quadricauda	7 hours
xylene	Acute EC50 4.36 mg/l ***TO BE TRANSLATED*** Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1 mg/l ***TO BE TRANSLATED*** Fresh water	Daphnia - Daphnia magna	24 hours
	Acute LC50 4.2 mg/l ***TO BE TRANSLATED*** Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic EC10 1.9 mg/l ***TO BE TRANSLATED*** Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 1.17 mg/l ***TO BE TRANSLATED*** Fresh water	Daphnia - Ceriodaphnia dubia	7 days
	Chronic NOEC >1.3 mg/l Fresh water	Fish - Oncorhynchus mykiss	56 days

2-methoxy-1-methylethyl acetate	Acute EC50 >1000 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 >500 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 >100 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC >1000 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC >100 mg/l Fresh water	Daphnia - Daphnia magna	21 days
ethylbenzene	Acute EC50 7.7 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 3.6 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 1.81 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.49 mg/l Marine water	Crustaceans - Crago franciscorium	96 hours
	Acute LC50 5.1 mg/l Marine water	Fish - Menidia menidia	96 hours
	Acute LC50 12.1 mg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
dimethyl ether	-	5 % - 28 days	-	-
propan-2-ol	-	53 % - 5 days	-	-
xylene	-	87.8 % - 28 days	-	-
2-methoxy-1-methylethyl acetate	-	83 % - 28 days	-	-
ethylbenzene	-	79 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
dimethyl ether	-	-	Not readily
propan-2-ol	-	-	Readily
xylene	-	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily
ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
dimethyl ether	0.07	-	low
propan-2-ol	0.05	-	low
xylene	3.12	<25.9	low
2-methoxy-1-methylethyl acetate	1.2	-	low
ethylbenzene	3.6	1	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).

Do not allow to enter drains or watercourses.
Dispose of according to all federal, state and local applicable regulations.
If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
For further information, contact your local waste authority.

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 : The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC) : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 01 11

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.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.
Empty containers must be scrapped or reconditioned.
Dispose of containers contaminated by the product in accordance with local or national legal provisions.

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.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	Aerosol.	Aerosol.	Aerosol.
14.3 Transport hazard class(es)	2	2.1	2.1
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.
Additional information	**Tunnel code** (D)	-	-

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 73/78 and the IBC Code : Not available.

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

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-for-Use Mixture : Not applicable.

Europe inventory : Not determined.

Aerosol dispensers :

3

Extremely flammable

Seveso II Directive

This product is controlled under the Seveso II Directive.

Danger criteria

Category
P3a: Flammable aerosols containing flammable gases or flammable liquids C8: Extremely flammable (R12 or any flammable maintained at temperature > boiling point)

National regulations

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Japan : Not determined.

Malaysia	:	Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
United States	:	Not determined.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

CEPE code : 1

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]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Flam. Aerosol 1, H222	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method

Full text of abbreviated H statements :

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H312 (dermal)	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332 (inhalation)	Harmful if inhaled.
H335 (Respiratory tract irritation)	May cause respiratory irritation. (Respiratory tract irritation)
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
H373	May cause damage to organs through prolonged or repeated exposure.

Full text of classifications [CLP/GHS] :

Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Aerosol 1, H222	FLAMMABLE AEROSOLS - Category 1
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. Gas, H280	GASES UNDER PRESSURE - Compressed gas
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3, H335 (Respiratory tract irritation)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Full text of abbreviated R phrases : R12- Extremely flammable.
R11- Highly flammable.
R10- Flammable.
R20- Harmful by inhalation.
R20/21- Harmful by inhalation and in contact with skin.
R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65- Harmful: may cause lung damage if swallowed.
R36- Irritating to eyes.
R37/38- Irritating to respiratory system and skin.
R36/37/38- Irritating to eyes, respiratory system and skin.
R67- Vapours may cause drowsiness and dizziness.

Full text of classifications [DSD/DPD] : F+ - Extremely flammable
F - Highly flammable
Xn - Harmful
Xi - Irritant

Date of printing : 10/4/2015.

Date of issue/ Date of revision : 10/4/2015

Date of previous issue : 10/4/2015.

Version : 9

Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

Whilst every effort has been made to ensure the accuracy of the information supplied. F.H.Brundle cannot be held responsible for any errors or omissions. This product must only be employed for its original intended use. Any other use is wrong and potentially dangerous. Application must be carried out in full compliance with current regulations. Please consult the relevant Safety Data Sheet (SDS) for further information. F.H.Brundle cannot be held liable for any damages resulting from wrongful, erroneous or negligent use.

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Jan 2015.