

THE PERFECT FINISH

# SAFETY DATA SHEET Hobby & Craft Sealer

According to Regulation (EC) No 1907/2006

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

# 1.1. Product identifier

Product name	Hobby & Craft Sealer
Internal Id	E414001-3

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

Identified usesSpeciality PaintUses advised againstMust not be handled in confined space without sufficient ventilation.

# 1.3. Details of the supplier of the safety data sheet

Diaati Kata I td
Plasti-Kote Ltd.
PO Box 867,
Pampisford,
Cambridge,
CB22 3XP
T:44 (0) 1223 836400
F:44 (0) 1223 836686
sds@plasti-kote.co.uk

# 1.4. Emergency telephone number

+44(0)1223 836400 (08:30am to 16:00pm Monday-Friday)

# SECTION 2: HAZARDS IDENTIFICATION

# 2.1. Classification of the substance or mixture

### Classification (1999/45/EEC) F+;R12.

### Human health

Supplier

In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause minor irritation on eye contact. May cause minor irritation on skin contact. **Environment** 

The product is not expected to be hazardous to the environment.

### **Physical and Chemical Hazards**

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Containers can burst violently when heated, due to excess pressure build-up.

### 2.2. Label elements

Labelling



**Risk Phrases** 

Safety Phrases

A1

R12

A2

Extremely flammable.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

1/20

S2	Keep out of the reach of children.
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour/spray.
S24/25	Avoid contact with skin and eyes.
S51	Use only in well-ventilated areas.

# 2.3. Other hazards

This product does not contain any PBT or vPvB substances.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

# 3.2. Mixtures

DIMETHYL ETHER			25-50%
CAS-No.: 115-10-6	EC No.: 204-065-8		
Classification (EC 1272/2008) Flam. Gas 1 - H220		Classification (67/548/EEC) F+;R12	
ETHANOL			10-15%
CAS-No.: 64-17-5	EC No.: 200-578-6		
Classification (EC 1272/2008) Flam. Liq. 2 - H225		Classification (67/548/EEC) F;R11	
PROPAN-2-OL			5-10%
CAS-No.: 67-63-0	EC No.: 200-661-7		
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R67	
2-BUTOXYETHANOL			5-10%
CAS-No.: 111-76-2	EC No.: 203-905-0		
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319		Classification (67/548/EEC) Xn;R20/21/22 Xi;R36/38	
METHANOL			< 1%
CAS-No.: 67-56-1	EC No.: 200-659-6		

Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370 Classification (67/548/EEC) F;R11 T;R23/24/25,R39/23/24/25

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation

Move the exposed person to fresh air at once. Place unconscious person on the side in the recovery position and ensure breathing can take place. Keep the affected person warm and at rest. Get prompt medical attention.

# Ingestion

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention if any discomfort continues. **Skin contact** 

Wash skin with soap and water. Get medical attention if irritation persists after washing.

### Eye contact

Spray in the eyes: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

### **General information**

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

Vapours may cause headache, fatigue, dizziness and nausea. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. **Ingestion** 

Due to the physical nature of this material it is unlikely that swallowing will occur. May cause nausea, headache, dizziness and intoxication.

#### Skin contact

No specific symptoms noted. Prolonged skin contact may cause redness and irritation.

### Eye contact

No specific symptoms noted. May cause temporary eye irritation.

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

No specific chemical antidote is known to be required after exposure to this product. Treat Symptomatically.

# **SECTION 5: FIREFIGHTING MEASURES**

### 5.1. Extinguishing media

### Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

#### Unsuitable extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

### Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

### **Unusual Fire & Explosion Hazards**

Aerosol cans may explode in a fire. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Vapours are heavier than air and may spread near ground to sources of ignition. **Specific hazards** 

Pressurised container: Must not be exposed to temperatures above 50°C.

### 5.3. Advice for firefighters

### **Special Fire Fighting Procedures**

Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved. Use water spray to reduce vapours.

### Protective equipment for fire-fighters

Wear full protective clothing. Use air-supplied respirator during fire fighting.

# SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of vapours and aerosol spray. In case of inadequate ventilation use suitable respirator. Avoid contact with skin and eyes.

### 6.2. Environmental precautions

Exposure to aquatic environment unlikely. Avoid discharge into drains.

### 6.3. Methods and material for containment and cleaning up

Ventilate well. Clean contaminated area with oil-removing material.

### 6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. For waste disposal, see section 13.

### **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. During application and drying, solvent vapours will be emitted. Avoid inhalation of vapours and spray mists. Keep away from heat, sparks and open flame. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

### 7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place.

### 7.3. Specific end use(s)

Paint.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
2-BUTOXYETHANOL	WEL	25 ppm	123 mg/m3	50 ppm	246 mg/m3	Sk
DIMETHYL ETHER	WEL	400 ppm	766 mg/m3	500 ppm	958 mg/m3	
ETHANOL	WEL	1000 ppm	1920 mg/m3			
METHANOL	WEL	200 ppm	266 mg/m3	250 ppm	333 mg/m3	Sk
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

### 8.2. Exposure controls

#### **Protective equipment**



### Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. **Respiratory equipment** 

Must not be handled in confined space without sufficient ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Contains low-boiling liquids. Use an air-supplied respirator, if necessary.

### Hand protection

Skin irritation is not anticipated when used normally. For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Butyl rubber. Nitrile. (conforming to standard EN 374) Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

### Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. (conforming to standard EN 166) **Hygiene measures** 

When using do not eat, drink or smoke. Wash promptly with soap & water if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated.

### Thermal hazards

Contains dimethyl ether, liquefied. Contact with liquid form may cause frostbite.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless.
Odour	Organic solvents.
Solubility	Immiscible with water Soluble in: Organic solvents.
Initial boiling point and boiling	-23 °C @ 760 mm Hg
range (°C)	
	(dimethyl ether)
Melting point (°C)	
No information available.	Taskaiselly, not facsible
	Technically not feasible.
Relative density	~ 0.85
Vapour density (air=1)	
	Vapours are heavier than air and may spread near ground to sources of ignition.
Vapour pressure	3850 mm Hg @ 25 °C
	(dimethyl ether)
Evaporation rate	
No information available.	The product contains volatile organic compounds (VOC) which will evaporate easily from all
	surfaces.
pH-Value, Conc. Solution	
Not relevant	
	Insoluble in water
Viscosity	
No information available.	
Decomposition temperature (°C	
No information available.	
Odour Threshold, Lower	
No information available.	$(0^{\circ} 0, 0, 0)$
Flash point (°C)	- 40°C CC (Closed cup).
A ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	(dimethyl ether)
Auto Ignition Temperature (°C)	
	(dimethyl ether)
Flammability Limit - Lower(%)	3.3 %

Flammability Limit - Upper(%) 26.2 %

(dimethyl ether)

# **Partition Coefficient**

(N-Octanol/Water) Not available.

#### **Explosive properties**

Not considered to be explosive.

### Explosive under influence of flame.

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures.

### **Oxidising properties**

Does not meet the criteria for oxidising.

### 9.2. Other information

**Volatility Description** 

Highly volatile.

# SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Not applicable. Hazardous Polymerisation Will not polymerise.

### 10.4. Conditions to avoid

When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Avoid heat, flames and other sources of ignition. Aerosol containers can explode when heated, due to excessive pressure build-up. Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

### Materials To Avoid

Strong oxidising substances.

### 10.6. Hazardous decomposition products

None at ambient temperatures. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

# SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

### Acute toxicity:

Based on available data the classification criteria are not met.

#### Skin Corrosion/Irritation:

Based on available data the classification criteria are not met. May cause minor irritation on skin contact.

#### Serious eye damage/irritation:

Based on available data the classification criteria are not met. Spray and vapour in the eyes may cause irritation and smarting.

#### Respiratory or skin sensitisation:

There is no evidence that the material can lead to respiratory hypersensitivity. Based on available data the classification criteria are not met. Not Sensitising.

### Germ cell mutagenicity:

Does not contain any substances known to be mutagenic.

### Carcinogenicity:

Does not contain any substances known to be carcinogenic.

### **Reproductive Toxicity:**

Does not contain any substances known to be toxic to reproduction.

### Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure:

Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard:

Not relevant, due to the form of the product.

### Toxicological information on ingredients.

ETHANOL (CAS: 64-17-5)

### Acute toxicity:

Acute Toxicity (Oral LD50) 10470 mg/kg Rat Based on available data the classification criteria are not met.

### Acute Toxicity (Dermal LD50)

> 15800 mg/kg Rat Based on available data the classification criteria are not met.

### Acute Toxicity (Inhalation LC50)

125 mg/l (vapours) Rat 4 hours Based on available data the classification criteria are not met.

### Skin Corrosion/Irritation:

Dose 0.2 ml 24 hr Rabbit Erythema\eschar score No erythema (0). Oedema score No oedema (0). Based on available data the classification criteria are not met. Not irritating. Extreme pH. Moderate pH ( > 2 and < 11.5). Non Corrosive to skin.

### Serious eye damage/irritation:

Slightly Irritating.

# Respiratory or skin sensitisation:

There is no evidence that the material can lead to respiratory hypersensitivity. **Skin sensitisation** Local Lymph Node Assay (LLNA) Mouse Based on available data the classification criteria are not met. Not Sensitising.

### Germ cell mutagenicity:

Genotoxicity - In Vitro Bacterial Reverse Mutation Test Negative. This substance has no evidence of mutagenic properties. Genotoxicity - In Vivo Chromosome aberration: Inconclusive. Based on available data the classification criteria are not met.

#### **Reproductive Toxicity:**

### Reproductive Toxicity - Fertility

Two-generation study: NOAEL 20700 mg/kg/day Oral Rat This substance has no evidence of toxicity to reproduction. **Reproductive Toxicity - Development** Developmental toxicity: LOAEL 8200 mg/kg/day Oral Rat

### Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure: STOT - Repeated exposure

LOAEL 3160 mg/kg Oral Rat Not classified as a specific target organ toxicant after repeated exposure.

# Aspiration hazard:

Viscosity Kinematic viscosity <= 20.5 mm2/s. Not anticipated to present an aspiration hazard based on chemical structure.

PROPAN-2-OL (CAS: 67-63-0)

### Acute toxicity:

Acute Toxicity (Oral LD50) 5840 mg/kg Rat Based on available data the classification criteria are not met.

### Acute Toxicity (Dermal LD50)

12900 mg/kg Rabbit Based on available data the classification criteria are not met.

### Acute Toxicity (Inhalation LC50)

> 10000 ppmV (gas) Rat 4 hours
 Based on available data the classification criteria are not met.

### Skin Corrosion/Irritation:

Dose 4 hr Rabbit Erythema\eschar score No erythema (0). Oedema score No oedema (0). Based on available data the classification criteria are not met. Not irritating.

### Serious eye damage/irritation:

Irritating to eyes.

### Respiratory or skin sensitisation:

Respiratory sensitisation Not determined. There is no evidence that the material can lead to respiratory hypersensitivity. Skin sensitisation Buehler test: Guinea Pig Based on available data the classification criteria are not met. Not Sensitising.

### Germ cell mutagenicity:

Genotoxicity - In Vitro Bacterial Reverse Mutation Test Negative. This substance has no evidence of mutagenic properties. Genotoxicity - In Vivo Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.

Carcinogenicity: Carcinogenicity NOAEL 5000 ppm Inhalation. Rat This substance has no evidence of carcinogenic properties.

### Reproductive Toxicity:

Reproductive Toxicity - Fertility Two-generation study: NOAEL 500 mg/kg/day Oral Rat Based on available data the classification criteria are not met. Reproductive Toxicity - Development Maternal toxicity: NOAEL 240 mg/kg/day Oral Rabbit Based on available data the classification criteria are not met.

# Specific target organ toxicity - single exposure:

STOT SE 3 Central nervous system depression including narcotic effects such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

### Specific target organ toxicity - repeated exposure:

### STOT - Repeated exposure

NOAEL 5000 ppmV/6hr/day Inhalation. Rat Not classified as a specific target organ toxicant after repeated exposure.

# Aspiration hazard:

### Viscosity

Kinematic viscosity <= 20.5 mm2/s.

Not anticipated to present an aspiration hazard based on chemical structure.

2-BUTOXYETHANOL (CAS: 111-76-2)

Toxic Conc. - LC 50 450 ppm/4h (inh-rat)

Acute toxicity: Acute Toxicity (Oral LD50) 1746 mg/kg Acute Tox. 4 Harmful if swallowed.

### Acute Toxicity (Dermal LD50)

435 mg/kg Rabbit
Acute Tox. 4 Harmful in contact with skin.
Acute Toxicity (Inhalation LC50)
2.2 mg/l (vapours) Rat
Acute Tox. 4 Harmful if inhaled.

Skin Corrosion/Irritation: Dose 0.5 ml 4 hr Rabbit Erythema\eschar score Well defined erythema (2). Oedema score Very slight oedema -barely perceptible (1). Skin Irrit. 2 Causes skin irritation.

<u>Serious eye damage/irritation:</u> Eye Irrit. 2 Causes serious eye irritation.

### Respiratory or skin sensitisation:

There is no evidence that the material can lead to respiratory hypersensitivity. **Skin sensitisation** Guinea pig maximization test (GPMT): Guinea Pig Based on available data the classification criteria are not met. Not Sensitising.

### Germ cell mutagenicity:

Genotoxicity - In Vitro Bacterial Reverse Mutation Test Negative. This substance has no evidence of mutagenic properties. Genotoxicity - In Vivo Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.

# Carcinogenicity:

**Carcinogenicity** NOAEL >125 ppm Inhalation. Rat Based on available data the classification criteria are not met.

### **Reproductive Toxicity:**

**Reproductive Toxicity - Fertility** Two-generation study: NOAEL 720 mg/kg Oral Rat This substance has no evidence of toxicity to reproduction.

### Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard:

Viscosity Kinematic viscosity <= 20.5 mm2/s. Not anticipated to present an aspiration hazard based on chemical structure.

DIMETHYL ETHER (CAS: 115-10-6)

### Acute toxicity:

# Acute Toxicity (Oral LD50) No information available. Technically not feasible. Acute Toxicity (Dermal LD50) No information available.

Technically not feasible.

### Acute Toxicity (Inhalation LC50)

164000 ppmV (gas) Rat 4 hours REACH dossier information Conclusive data but not sufficient for classification.

### Skin Corrosion/Irritation:

Not irritating.

# Serious eye damage/irritation:

Not Irritating.

# Respiratory or skin sensitisation:

Respiratory sensitisation No information available. There is no evidence that the material can lead to respiratory hypersensitivity. Skin sensitisation No information available. Technical impossibility to obtain the data. Not sensitising.

### Germ cell mutagenicity:

Genotoxicity - In Vitro Bacterial Reverse Mutation Test REACH dossier information Negative. This substance has no evidence of mutagenic properties. Genotoxicity - In Vivo Gene Mutation: REACH dossier information Negative. This substance has no evidence of mutagenic properties.

# Carcinogenicity:

**Carcinogenicity** NOAEL 47106 mg/m3 Inhalation. Rat REACH dossier information This substance has no evidence of carcinogenic properties.

# Reproductive Toxicity:

Reproductive Toxicity - Fertility NOAEC 47106 mg/m3 Inhalation. Rat REACH dossier information This substance has no evidence of toxicity to reproduction. Reproductive Toxicity - Development Developmental toxicity: NOAEC 75370 mg/m3 Inhalation. Rat REACH dossier information This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure:

#### **STOT - Single exposure**

No information available. Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure:

**STOT - Repeated exposure** NOAEC 47106 mg/l/6hr/day Inhalation. Rat Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard:

Viscosity No information available. Based on available data the classification criteria are not met.

# SECTION 12: ECOLOGICAL INFORMATION

# 12.1. Toxicity

### **Acute Fish Toxicity**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### Ecological information on ingredients.

# ETHANOL (CAS: 64-17-5)

Acute Toxicity - Fish LC50 96 hours 15300 mg/l Pimephales promelas (Fat-head Minnow) Acute Toxicity - Aquatic Invertebrates EC50 48 hours 5012 mg/l Ceriodaphnia dubia Acute Toxicity - Aquatic Plants EC50 96 hours 675 mg/l Chlorella vulgaris Acute Toxicity - Microorganisms EC50 3 hours > 1000 mg/l Activated sludge Chronic Toxicity - Aquatic Invertebrates NOEC 10 days 9.6 mg/l Daphnia magna

### PROPAN-2-OL (CAS: 67-63-0)

Acute Toxicity - Fish LC50 96 hours 9640 mg/l Pimephales promelas (Fat-head Minnow) Acute Toxicity - Aquatic Invertebrates EC50 24 hours > 10000 mg/l Daphnia magna Acute Toxicity - Aquatic Plants LOEC 192 hours 1800 mg/l Scenedesmus subspicatus Acute Toxicity - Microorganisms LOEC 16 hours 1050 mg/l Activated sludge

### 2-BUTOXYETHANOL (CAS: 111-76-2)

Acute Toxicity - Fish LC50 96 hours 1474 mg/l Onchorhynchus mykiss (Rainbow trout) Acute Toxicity - Aquatic Invertebrates EC50 48 hours 1550 mg/l Daphnia magna Acute Toxicity - Aquatic Plants EC50 72 hours 1840 mg/l Pseudokirchnerella subcapitata Chronic Toxicity - Aquatic Invertebrates NOEC 21 days 100 mg/l

### DIMETHYL ETHER (CAS: 115-10-6)

Acute Toxicity - Fish NOEC 96 hours > 4.1 mg/l Poecilia reticulata (Guppy) REACH dossier information Acute Toxicity - Aquatic Invertebrates NOEC 48 hours > 4.4 mg/l Daphnia magna REACH dossier information Acute Toxicity - Aquatic Plants NOEC 96 hours 155 mg/l Freshwater algae Estimated Value REACH dossier information Acute Toxicity - Microorganisms NOEC > 1600 mg/l Pseudomonas putida REACH dossier information

### 12.2. Persistence and degradability

#### Degradability

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Volatile substances are degraded in the atmosphere within a few days.

### Ecological information on ingredients.

# ETHANOL (CAS: 64-17-5)

# Phototransformation

Air. Half-life: ~ 40 hours Stability (Hydrolysis) No significant reaction in water. **Biodegradation** Water Degradation (74%) 5 days

### PROPAN-2-OL (CAS: 67-63-0)

### Stability (Hydrolysis) No significant reaction in water. **Biodegradation** Water Degradation (53%) 5 days The substance is readily biodegradable.

### 2-BUTOXYETHANOL (CAS: 111-76-2)

# Stability (Hydrolysis)

No significant reaction in water. **Biodegradation** Water Degradation (90%) 28 days The substance is readily biodegradable.

### DIMETHYL ETHER (CAS: 115-10-6)

### Phototransformation

Air. DT50 ~ 2.4 days The product is degraded completely by photochemical oxidation. **Biodegradation** Water and Sediment Degradation (5%) 28 days **REACH** dossier information No biodegradation observed under test conditions.

# 12.3. Bioaccumulative potential

### **Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating. Partition coefficient Not available.

Ecological information on ingredients.	
	ETHANOL (CAS: 64-17-5)
Bioaccumulative potential	
Will not bio-accumulate.	
Partition coefficient	
log Pow -0.35	
	PROPAN-2-OL (CAS: 67-63-0)
Bioaccumulative potential	
Will not bio-accumulate.	
Partition coefficient	
log Pow 0.05	
	2-BUTOXYETHANOL (CAS: 111-76-2)
Bioaccumulative potential	
Will not bio-accumulate.	
Partition coefficient	
log Pow 0.81	
	<u>DIMETHYL ETHER (CAS: 115-10-6)</u>
Bioaccumulative potential	
Will not bio-accumulate.	
Partition coefficient	
log Pow 0.07	
Estimated Value	

# 12.4. Mobility in soil

### Mobility:

The product is immiscible with water and will spread on the water surface. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

### Ecological information on ingredients.

### ETHANOL (CAS: 64-17-5)

### Mobility:

Highly volatile. The product is miscible with water. May spread in water systems. **Surface tension** 24.5 mN/m @ 20 °C

### PROPAN-2-OL (CAS: 67-63-0)

### Mobility:

Highly volatile. The product is miscible with water. May spread in water systems. 2-BUTOXYETHANOL (CAS: 111-76-2)

### Mobility:

The product is non-volatile. The product is miscible with water. May spread in water systems. **Henry's Law Constant** 0.063 Pa m3/mol @ 22 °C

### DIMETHYL ETHER (CAS: 115-10-6)

### Mobility:

Highly volatile. The product is water soluble and may spread in water systems. **Henry's Law Constant** 518.6 Pa m3/mol REACH dossier information

### 12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

### Ecological information on ingredients.

# ETHANOL (CAS: 64-17-5)

Not Classified as PBT/vPvB by current EU criteria.

PROPAN-2-OL (CAS: 67-63-0)

Not Classified as PBT/vPvB by current EU criteria.

2-BUTOXYETHANOL (CAS: 111-76-2)

Not Classified as PBT/vPvB by current EU criteria.

DIMETHYL ETHER (CAS: 115-10-6)

Not Classified as PBT/vPvB by current EU criteria.

# 12.6. Other adverse effects

Not applicable.

# SECTION 13: DISPOSAL CONSIDERATIONS

### **General information**

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

# 13.1. Waste treatment methods

Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements. **Waste Class** 

European Waste Catalogue (EWC) : 08 01 11 (waste paint and varnish containing organic solvents or other dangerous substances).

# SECTION 14: TRANSPORT INFORMATION

# 14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

# 14.2. UN proper shipping name

Proper Shipping Name AEROSOLS (IATA : Aerosols, flammable)

# 14.3. Transport hazard class(es)

ADR/RID/ADN Class	2 (5F)
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1
Transport Labels	



# 14.4. Packing group

Not applicable.

# 14.5. Environmental hazards

**Environmentally Hazardous Substance/Marine Pollutant** No.

# 14.6. Special precautions for user

EMS F-D, S-U

Tunnel Restriction Code (D)

# 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant

# SECTION 15: REGULATORY INFORMATION

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

### **Approved Code Of Practice**

British Aerosol Manufacturers Association Standard

### **EU Legislation**

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

# **National Regulations**

The Aerosol Dispensers Regulations 2009 (SI 2824) The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

### Health and Environmental Listings

Regulation EC 2037/2000 on substances that deplete the ozone layer. Regulation EC 850/2004 on persistent organic pollutants. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. None of the ingredients are listed.

### Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

### Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

Seveso Category (Directive 2012/18/EU)

P3a (FLAMMABLE AEROSOLS). Lower Tier Requirements 150 tonnes. Upper Tier Requirements 500 Tonnes.

### 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

### SECTION 16: OTHER INFORMATION

#### Information Sources

Classification is based on the classification of the individual components (the conventional method). Test data are not available for the mixture itself. 04/04/2013 **Revision Date Risk Phrases In Full** R12 Extremely flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R11 Highly flammable R36/38 Irritating to eyes and skin. R36 Irritating to eyes. R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. R67 Vapours may cause drowsiness and dizziness. **Hazard Statements In Full** Causes damage to organs << Organs>>. H370 H319 Causes serious eye irritation. H315 Causes skin irritation. H222 Extremely flammable aerosol. H220 Extremely flammable gas. Harmful if inhaled. H332 H302 Harmful if swallowed. H312 Harmful in contact with skin. H225 Highly flammable liquid and vapour. H336 May cause drowsiness or dizziness. H331 Toxic if inhaled. H301 Toxic if swallowed. H311 Toxic in contact with skin.

### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.