

SAFETY DATA SHEET Industrial Spray Anyway Gloss Colours

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 Internal Id	Industrial Spray Anyway Gloss Colours A2353-2389NF
1.2. Relevant identified uses	of the substance or mixture and uses advised against
Identified uses	Speciality Paint
Uses advised against	Must not be handled in confined space without sufficient ventilation.
1.3. Details of the supplier o	f the safety data sheet
Supplier	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 n	umber_

+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) Xi;R36. F+;R12. R66, R67.

Human health

In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Spray and vapour in the eyes may cause irritation and smarting.

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





Extremely flammable

R12	Extremely flammable.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Risk Phrases

Safety Phrases

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.
Keep out of the reach of children.
Keep away from sources of ignition - No smoking.
Do not breathe vapour/spray.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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

ACETONE			25-50%
CAS-No.: 67-64-1	EC No.: 200-662-2		
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT SE 3 - H336		Classification (67/548/EEC) F;R11 Xi;R36 R66 R67	
PROPANE			15-20%
CAS-No.: 74-98-6	EC No.: 200-827-9		
Classification (EC 1272/2008) Flam. Gas 1 - H220		Classification (67/548/EEC) F+;R12	
ISOBUTYL METHYL KETONE			10-15%
CAS-No.: 108-10-1	EC No.: 203-550-1		
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Acute Tox. 4 - H332 Eye Irrit. 2 - H319 STOT SE 3 - H335		Classification (67/548/EEC) F;R11 Xn;R20 Xi;R36/37 R66	
BUTANE			5-10%
CAS-No.: 106-97-8 Substance with National workp	EC No.: 203-448-7 lace exposure limits.		
Classification (EC 1272/2008) Flam. Gas 1 - H220		Classification (67/548/EEC) F+;R12	

n-BUTYL ACETATE			5-10%
CAS-No.: 123-86-4	EC No.: 204-658-1		
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H336		Classification (67/548/EEC) R10 R66 R67	
ETHYL 3-ETHOXY PROPIONATE			1-5%
CAS-No.: 763-69-9	EC No.: 212-112-9		
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066		Classification (67/548/EEC) R66.	
TITANIUM DIOXIDE			1-5%
CAS-No.: 13463-67-7	EC No.: 236-675-5		
Substance with National workplace	e exposure limits.		
Classification (EC 1272/2008) Not classified.		Classification (67/548/EEC) Not classified.	
BARIUM SULPHATE			1-5%
CAS-No.: 7727-43-7 Substance with National workplace	EC No.: 231-784-4 e exposure limits.		
Classification (EC 1272/2008) Not classified.		Classification (67/548/EEC) Not classified.	
			< 1%
CAS-No.: 1309-37-1	EC No.: 215-168-2		
Substance with National workplace	e exposure limits.		
Classification (EC 1272/2008) Not classified.		Classification (67/548/EEC) Not classified.	
AMORPHOUS SILICA			< 1%
CAS-No.: 112926-00-8	EC No.:		
Classification (EC 1272/2008) STOT SE 3 - H335		Classification (67/548/EEC) Xi;R37.	
1,2,4-TRIMETHYLBENZENE			< 1%
CAS-No.: 95-63-6	EC No.: 202-436-9		

Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411 Classification (67/548/EEC) R10 Xn;R20 Xi;R36/37/38 N;R51/53

Classification (67/548/EEC)

Classification (67/548/EEC)

Xn;R65.

Xi:R38.

R10

Xn;R20/21 Xi;R38

N:R51/53.

R10,R67.

SOLVENT NAPHTHA, LIGHT AROMATIC (<0.1 % BENZENE)

CAS-No.: 64742-95-6

EC No.: 265-199-0

Classification (EC 1272/2008) Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

XYLENE

CAS-No.: 1330-20-7

EC No.: 215-535-7

Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315

ZIRCONIUM 2-ETHYLHEXANOATE

CAS-No.: 22464-99-9

EC No.: 245-018-1

Substance with National workplace exposure limits.

Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.

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 any discomfort continues.

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.

< 1%

< 1%

< 1%

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

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

Eye contact

Irritation of eyes and mucous membranes.

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
1,2,4-TRIMETHYLBENZENE	WEL	25 ppm	125 mg/m3			
ACETONE	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	
AMORPHOUS SILICA	WEL		2,4 mg/m3			
BARIUM SULPHATE	WEL		4 mg/m3			
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3	
IRON OXIDE	WEL		1 mg/m3		10 mg/m3	as Fe
ISOBUTYL METHYL KETONE	WEL	50 ppm	208 mg/m3	100 ppm	416 mg/m3	Sk
n-BUTYL ACETATE	WEL	150 ppm	724 mg/m3	200 ppm	966 mg/m3	
TITANIUM DIOXIDE	WEL		10 mg/m3			
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk
ZIRCONIUM 2-ETHYLHEXANOATE	WEL		5 mg/m3		10 mg/m3	as Zr

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 petroleum gas, 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	Misc. colours.
Odour	Organic solvents.

Solubility	Immiscible with water Soluble in: Organic solvents.
Initial boiling point and boiling	0
range	
	(petroleum gas)
Melting point (°C)	
Not available.	
	Technically not feasible.
Relative density	~ 0.85
Vapour density (air=1)	>1
	Vapours are heavier than air and may spread near ground to sources of ignition.
Vapour pressure	> 1000 mbar @ 20 °C
	(petroleum gas)
Evaporation rate	
No information available.	
	The product contains volatile organic compounds (VOC) which will evaporate easily from all
Viscosity	surfaces.
No information available.	
Decomposition temperature (°C	2)
No information available.	-,
Flash point	< -60°C CC (Closed cup).
-	(petroleum gas)
Auto Ignition Temperature (°C)	~ 450 °C
	(petroleum gas)
Flammability Limit - Lower(%)	2%
	(petroleum gas)
Flammability Limit - Upper(%)	10 %
	(petroleum gas)
Partition Coefficient	
(N-Octanol/Water)	
Not available.	
Explosive properties	
Not considered to be explosive. Explosive under influence of fla	
	ble, and explosive vapour/air mixtures may be formed even at normal room temperatures.
Oxidising properties	ole, and explosive vapour/air mixtures may be formed even at normal room temperatures.
Does not meet the criteria for oxid	dising
9.2. Other information	wonig.
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:

Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

Serious eye damage/irritation:

Irritating to eyes. 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:

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:

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.

ACETONE (CAS: 67-64-1)

Acute toxicity:

Acute Toxicity (Oral LD50) 5800 mg/kg Rat Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

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

Acute Toxicity (Inhalation LC50)

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

Skin Corrosion/Irritation:

Dose 0.01 ml 3 day Guinea Pig Erythema\eschar score No erythema (0). Oedema score No oedema (0). May cause defatting of the skin, but is not an irritant. Based on available data the classification criteria are not met. Extreme pH. Moderate pH (> 2 and < 11.5). Non Corrosive to skin.

Serious eye damage/irritation:

Draize test: Irritating to eyes.

Respiratory or skin sensitisation:

Respiratory sensitisation Guinea Pig Guinea pig maximization test (GPMT): Not sensitising. Based on available data the classification criteria are not met. Skin sensitisation Guinea pig maximization test (GPMT): Guinea Pig Not Sensitising.

Germ cell mutagenicity:

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

Carcinogenicity:

Carcinogenicity NOAEL ~4000 mg/kg/day Dermal Mouse Estimated Value No evidence of carcinogenicity in animal studies

Reproductive Toxicity:

Reproductive Toxicity - Fertility NOAEC >4858 mg/kg/day Oral Mouse This substance has no evidence of toxicity to reproduction. Based on available data the classification criteria are not met. Reproductive Toxicity - Development Teratogenicity: NOAEC 11000 ppm Inhalation. Rat No evidence of reproductive toxicity in animal studies 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:

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

Aspiration hazard:

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

ISOBUTYL METHYL KETONE (CAS: 108-10-1)

Acute toxicity:

Acute Toxicity (Oral LD50) 2080 mg/kg Rat REACH dossier information Conclusive data but not sufficient for classification.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat
 REACH dossier information
 Conclusive data but not sufficient for classification.

Acute Toxicity (Inhalation LC50)

< 4000 ppmV (gas) Rat 4 hours (LC50 = 2000-4000 ppm) REACH dossier information Harmful by inhalation.

Skin Corrosion/Irritation:

Dose 0.5 ml 4 hr Rabbit Erythema\eschar score No erythema (0). Oedema score No oedema (0). Not irritating. Extreme pH. Moderate pH (> 2 and < 11.5). Non Corrosive to skin.

Serious eye damage/irritation:

Slightly Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation No information available. There is no evidence that the material can lead to respiratory hypersensitivity. Skin sensitisation Guinea pig maximization test (GPMT): Guinea Pig REACH dossier information Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In VitroBacterial Reverse Mutation TestREACH dossier informationNegative.This substance has no evidence of mutagenic properties.Genotoxicity - In VivoChromosome aberration:REACH dossier informationNegative.This substance has no evidence of mutagenic properties.

Carcinogenicity:

Carcinogenicity NOAEL 450 ppm Inhalation. Rat REACH dossier information

This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:

Reproductive Toxicity - Fertility Two-generation study: NOAEC 1000 ppm Inhalation. Rat REACH dossier information No evidence of reproductive toxicity in animal studies Reproductive Toxicity - Development Teratogenicity: NOAEC 3000 ppm Inhalation. Rat REACH dossier information No evidence of reproductive toxicity in animal studies

Specific target organ toxicity - single exposure:

STOT - Single exposure
Dose Level: 500 ppm Inhalation. Human
Irritating to respiratory system.
Target Organs
Respiratory system, lungs
Respiratory irritant effects that impair function with symptoms such as cough, pain, choking, and breathing difficulties.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure NOAEC 450 ppmV/6hr/day Inhalation. Rat REACH dossier information Target Organs Kidneys Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

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

n-BUTYL ACETATE (CAS: 123-86-4)

Acute toxicity:

Acute Toxicity (Oral LD50) 10760 mg/kg Rat REACH dossier information Conclusive data but not sufficient for classification.

Acute Toxicity (Dermal LD50)

> 14112 mg/kg Rabbit
 REACH dossier information
 Conclusive data but not sufficient for classification.

Acute Toxicity (Inhalation LC50)

> 21.1 mg/l (vapours) Rat 4 hours
 REACH dossier information
 Conclusive data but not sufficient for classification.

Skin Corrosion/Irritation:

Dose 0.5 ml 4 hr Erythema\eschar score No erythema (0). Oedema score No oedema (0). REACH dossier information Not irritating. Extreme pH. Moderate pH (> 2 and < 11.5).

Non Corrosive to skin.

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 Buehler test: Guinea Pig REACH dossier information Not Sensitising.

Germ cell mutagenicity:

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

Carcinogenicity:

Carcinogenicity No information available. This substance has no evidence of carcinogenic properties.

Reproductive Toxicity: Reproductive Toxicity - Fertility Fertility: NOAEC 2000 ppm Inhalation. Rat

REACH dossier information Based on available data the classification criteria are not met. **Reproductive Toxicity - Development** Developmental toxicity: NOAEC 750 ppm Inhalation. Rat REACH dossier information Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - Single exposure

No information available.

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 NOAEC 500 ppmV/6hr/day Inhalation. Rat REACH dossier information Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

Viscosity

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

ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9)

Acute toxicity:

Acute Toxicity (Oral LD50) 4309 mg/kg Rat Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

4080 mg/kg Rabbit Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 998 ppmV (gas) Rat 4 hours
 Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Dose 0.5 ml 72 hr Rabbit Erythema\eschar score No erythema (0). Oedema score No oedema (0). Not irritating. Repeated exposure may cause skin dryness or cracking. Extreme pH. Moderate pH (> 2 and < 11.5). Not irritating.

Serious eye damage/irritation:

Conclusive data but not sufficient for classification. 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 Local Lymph Node Assay (LLNA) Guinea Pig Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.

Carcinogenicity:

Carcinogenicity No information available. This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:

Reproductive Toxicity - Development Teratogenicity: NOAEC >1000 ppm Inhalation. Rat No evidence of reproductive toxicity in animal studies

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

NOAEL 1000 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.

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.

ACETONE (CAS: 67-64-1)

Acute Fish Toxicity Not considered toxic to fish. **Acute Toxicity - Fish** LC50 96 hours 5540 mg/l Onchorhynchus mykiss (Rainbow trout) Acute Toxicity - Aquatic Invertebrates EC50 48 hours 12700 mg/l Daphnia magna **Acute Toxicity - Aquatic Plants** NOEC 192 hours 530 mg/l Microcystis aeruginosa Acute Toxicity - Microorganisms EC12 30 min 61150 mg/l Activated sludge **Chronic Toxicity - Aquatic Invertebrates** NOEC 28 days 2212 mg/l Daphnia magna ISOBUTYL METHYL KETONE (CAS: 108-10-1) **Acute Toxicity - Fish** NOEC 96 hours > 179 mg/l Brachydanio rerio (Zebra Fish) **REACH** dossier information Acute Toxicity - Aquatic Invertebrates NOEC 48 hours > 200 mg/l Daphnia magna **REACH** dossier information **Acute Toxicity - Aquatic Plants** NOEC 192 hours 136 mg/l Microcystis aeruginosa **REACH** dossier information **Chronic Toxicity - Aquatic Invertebrates** NOEC 21 days 30 mg/l Daphnia magna n-BUTYL ACETATE (CAS: 123-86-4) **Acute Toxicity - Fish** LC50 96 hours 18 mg/l Pimephales promelas (Fat-head Minnow) **REACH** dossier information **Acute Toxicity - Aquatic Invertebrates** EC50 48 hours 44 mg/l Daphnia magna **REACH** dossier information **Acute Toxicity - Aquatic Plants** EC50 72 hours 674.7 mg/l Scenedesmus subspicatus **REACH** dossier information NOEC 72 hours 200 mg/l Scenedesmus subspicatus **REACH** dossier information **Chronic Toxicity - Aquatic Invertebrates** NOEC 21 days 23 mg/l Daphnia magna Estimated Value REACH dossier information ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9) **Acute Toxicity - Fish** LC50 96 hours 90 mg/l Pimephales promelas (Fat-head Minnow) Acute Toxicity - Aquatic Invertebrates EC50 48 hours 785 mg/l Daphnia magna NOEC 48 hours 461 mg/l Daphnia magna **Acute Toxicity - Aquatic Plants** NOEC 72 hours 115 mg/l Selenastrum capricornutum Acute Toxicity - Microorganisms EC50 > 5000 mg/l Activated sludge

NOEC 16 hours 500 mg/l Activated sludge

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.

ACETONE (CAS: 67-64-1)

Phototransformation

Air. DT50 20 ~ 115 days **Stability (Hydrolysis)** No significant reaction in water. **Biodegradation** Water and Sediment Degradation (90%) 28 days The substance is readily biodegradable.

ISOBUTYL METHYL KETONE (CAS: 108-10-1)

Degradability

The substance is readily biodegradable. **Stability (Hydrolysis)** No significant reaction in water. **Biodegradation** Water Degradation (83%) 28 days REACH dossier information

n-BUTYL ACETATE (CAS: 123-86-4)

Degradability

The product is easily biodegradable. Phototransformation Air. Half-life: 3.3 days REACH dossier information Stability (Hydrolysis) pH7 Half-life: ~ 26 months @ 25 °C Estimated Value REACH dossier information Biodegradation Water Degradation (80%) 5 days REACH dossier information

ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9)

Degradability

The product is easily biodegradable. Phototransformation Air. Half-life: ~ 24 hours Estimated Value Biodegradation Degradation (80%) 13 days Degradation refers to mineralisation. The substance is readily biodegradable. Bioaccumulative potential

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.

ACETONE (CAS: 67-64-1)

Bioaccumulative potential

Will not bio-accumulate.

Bioaccumulation factor BCF 3 Estimated Value Partition coefficient

log Pow - 0.24

Bioaccumulative potential

Will not bio-accumulate. **Partition coefficient** log Pow 1.9

ISOBUTYL METHYL KETONE (CAS: 108-10-1)

n-BUTYL ACETATE (CAS: 123-86-4)

Bioaccumulative potential

Will not bio-accumulate. Bioaccumulation factor BCF ~ 15.3 Partition coefficient log Pow 2.3

ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9)

Bioaccumulative potential Will not bio-accumulate. Bioaccumulation factor BCF ~ 3.05 Estimated Value Partition coefficient log Pow 1.47

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.

ACETONE (CAS: 67-64-1)

Mobility:

Highly volatile. The product is water soluble and may spread in water systems. Henry's Law Constant 2.303 Pa m3/mol @ 15 °C Surface tension 23.3 mN/m @ 20 °C

ISOBUTYL METHYL KETONE (CAS: 108-10-1)

Mobility:

Highly volatile. The product is water soluble and may spread in water systems. Adsorption/Desorption Coefficient log Koc 2.008 REACH dossier information Henry's Law Constant 18.75 Pa m3/mol @ 20 °C REACH dossier information

n-BUTYL ACETATE (CAS: 123-86-4)

Mobility:

Volatile The product is insoluble in water and will spread on the water surface. Henry's Law Constant 28.5 Pa m3/mol

ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9)

Mobility:

Volatile The product is partly miscible with water and may spread in the aquatic environment. **Surface tension** 66 mN/m 20

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

Not Classified as PBT/vPvB by current EU criteria. ISOBUTYL METHYL KETONE (CAS: 108-10-1)

Not Classified as PBT/vPvB by current EU criteria.

n-BUTYL ACETATE (CAS: 123-86-4)

Not Classified as PBT/vPvB by current EU criteria.

ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not applicable.

Ecological information on ingredients.

ACETONE (CAS: 67-64-1)

None known.

ISOBUTYL METHYL KETONE (CAS: 108-10-1)

None known.

n-BUTYL ACETATE (CAS: 123-86-4)

None known.

ETHYL 3-ETHOXY PROPIONATE (CAS: 763-69-9)

None known.

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 (EEC) 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.

Revision Date	30/10/2012
Supersedes date	22/08/2011
Risk Phrases In Full	
R12	Extremely flammable.
R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36/37	Irritating to eyes and respiratory system.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
NC	Not classified.
R66	Repeated exposure may cause skin dryness or cracking.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full	
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H222	Extremely flammable aerosol.
H220	Extremely flammable gas.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.
H411	Toxic to aquatic life with long lasting effects.

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.