

# SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY:

Trade Name:	Application:	Manufacturer/Supplier:
Brodie&Middleton Cellulose Varnish	Artists' and Theatrical Paint Varnish	Brodie&Middleton Ltd 30-31 Store Street London WC1E 7QE Telephone: 020-7836 3289 Fax: 020-7636 8733

# SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS:

### Substances.

Information not relevant.

#### Mixtures.

# **Contains**:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).	
TOLUENE				
CAS. 108-88-3 EC. 203-625-9 INDEX. 601-021-00-3	45 - 47.5	Repr. Cat. 3 R63, R67, F R11, Xn R48/20, Xn R65, Xi R38	Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336	
4-METHYLPENTAN-2-	ONE			
CAS. 108-10-1 EC. 203-550-1 INDEX. 606-004-00-4	10 - 11.5	R66, F R11, Xn R20, Xi R36/37	Flam. Liq. 2 H225, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335, EUH066	
BUTANOL				
CAS. 71-36-3 EC. 200-751-6 INDEX. 603-004-00-6	6 – 7	R10, R67, Xn R22, Xi R37/38, Xi R41	Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336	
N-BUTYL ACETATE				
CAS. 123-86-4 EC. 204-658-1 INDEX. 607-025-00-1	6 – 7	R10, R66, R67	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066	
ISOPROPYL ACETATE		·		
CAS. 108-21-4 EC. 203-561-1 INDEX. 607-024-00-6	5 – 6	R66, R67, F R11, Xi R36, Note C	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066, Note C	
PROPAN-2-OL	PROPAN-2-OL			
CAS. 67-63-0 EC. 200-661-7 INDEX. 603-117-00-0	3.5 – 4	R67, F R11, Xi R36	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336	
1-METHOXY-2-PROPANOL				
CAS. 107-98-2 EC. 203-539-1 INDEX. 603-064-00-3	2 - 2.5	R10, R67	Flam. Liq. 3 H226, STOT SE 3 H336	

Note:



### SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS (Cont.):

Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F),

N = Dangerous for the Environment(N)

#### SECTION 3: HAZARDS IDENTIFICATION:

#### Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

# Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard	Flam. Liq. 2	H225
classification and	Repr. 2	H361d
indication:	Asp. Tox. 1	H304
	STOT RE 2	H373
	Eye Dam. l	H318
	Skin Irrit. 2	H315
	STOT SE 3	H336

# 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols: F-Xn

**R phrases:** 11-36/38-48/20-Repr. Cat. 3 63-65-66-67

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

#### Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



Signal words:

Danger



#### **SECTION 3:** HAZARDS IDENTIFICATION (Cont.): Hazards statements: H225 Highly flammable liquid and vapour. H361d Suspected of damaging the unborn child. H304 May be fatal if swallowed and enters airways. H373 May cause damage to organs through prolonged or repeated exposure. H318 Causes serious eye damage. H315 Causes skin irritation. May cause drowsiness or dizziness. H336 EUH066 Repeated exposure may cause skin dryness or cracking. P201 Obtain special instructions before use. Precautionary statements: P210 Keep away from heat / sparks / open flames / hot surfaces. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. **Contains:** TOLUENE BUTANOL Other hazards. Information not available. **SECTION 4:** FIRST AID MEASURES Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 EYES: minutes, opening the eyelids fully. Get medical advice/attention. Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/ SKIN: attention. Have the subject drink as much water as possible. Get medical advice/attention. Do not **INGESTION:** induce vomiting unless explicitly authorised by a doctor. Get medical advice/attention immediately. Remove victim to fresh air, away from the **INHALATION:** accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers. Most important symptoms and effects, both acute and delayed For symptoms and effects caused by the contained substances, see chap. 11. Indication of any immediate medical attention and special treatment needed Information not available.



SECTION 5:	FIRE FIGHTING MEASURES
Extinguishing media:	Extinguishing substances are: carbon dioxide and chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
Unsuitable	Do not use jets of water.
Extinguishing Equipment	Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions
Special hazards	HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
arising from the substance or mixture	If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.
	Advice for firefighters
General Information	In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.
Special Protective Equipment for Fire-Fighters	Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).
<b>SECTION 6:</b>	ACCIDENTAL RELEASE MEASURES
	Personal precautions, protective equipment and emergency procedures
	Block the leakage if there is no hazard. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.
	Environmental precautions
	The product must not penetrate into the sewer system or come into contact with surface water or ground water.
	Methods and material for containment and cleaning up
	Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.
	Reference to other sections
	Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

#### Precaution for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised.

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.



## SECTION 7: HANDLING AND STORAGE (Cont.)

## Conditions for safe storage, including any incompatibilities

Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

#### Specific end use(s)

Artists' and general varnish.

### SECTION 8: <u>EXPOSURE CONTROLS / PERSONAL PROTECTION</u>

Control parameters Threshold Limit Value.

Туре.	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TOLUENE						· · · ·
TLV-ACGIH		75.4	20			
OEL	EU	192	50	384	100	SKIN
OEL	IRL	192	50	384	100	SKIN
WEL	UK	191	50	384	100	SKIN
4-METHYLPE	NTAN-2-ONE		<u>.</u>			
TLV-ACGIH		82	20	307	75	
OEL	EU	83	20	208	50	
OEL	IRL	83	20	208	50	SKIN
WEL	UK	208	50	416	100	SKIN
N-BUTYL ACE	ETATE					
TLV-ACGIH		713	150	950	200	
OEL	IRL	710	150	950	200	
WEL	UK	724	150	966	200	
BUTANOL				·		· · · ·
TLV-ACGIH		61	20			
OEL	IRL	20				SKIN
WEL	UK			154	50	SKIN
ISOPROPYL A	CETATE	-	î			
TLV-ACGIH		418	100		200	
OEL	IRL		100		200	
WEL	UK			849	200	
PROPAN-2-OI	· 					÷
TLV-ACGIH		492	200	983	400	
OEL	IRL		200		400	SKIN
WEL	UK	999	400	1250	500	
1-METHOXY-	2-PROPANOL	ž		· ·		·
TLV-ACGIH		369	100	553	150	
OEL	EU	375	100	568	150	SKIN
OEL	IRL	375	100	568	150	
WEL	UK	375	100	560	150	SKIN

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.



#### Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND Protect hands with category III work gloves (see standard EN 374).

**PROTECTION** The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN<br/>PROTECTIONWear category II professional long-sleeved overalls and safety footwear (see Directive<br/>89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing<br/>protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

**RESPIRATORY PROTECTION** If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### Environmental exposure controls.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.



# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Appearance	liquid
Colour	straw-coloured
Odour	characteristic of solvent
Odour threshold	Not available.
pH.	Not available.
Melting point / freezing point	Not available.
Initial boiling point.	> 35 °C.
Boiling range.	Not available.
Flash point.	< 23 °C.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	0.921 Kg/l
Solubility	Not available.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.



## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** The product can decompose and/or react violently.

TOLUENE:	breaks down in sunlight.
BUTANOL:	attacks various types of plastic.
1-METHOXY-2-PROPANOL:	absorbs and dissolves in water and in organic solvents, dissolves various plastic materials; it is stable but with air it may slowly form explosive peroxides.
4-METHYLPENTAN-2-ONE:	reacts violently with light metals, such as aluminium; attacks different types of plastic.
N-BUTYL ACETATE:	decomposes readily with water, especially when warm.

# Chemical stability: See previous paragraph.

Possibility of	See paragraph 10.1.
hazardous	
reactions:	

TOLUENE:	risk of explosion on contact with fuming sulphuric acid, nitric acid, silver perchlorates, nitrogen dioxide, non-metal halogenides, acetic acid, organic nitrocompounds. Can form explosive mixtures with the air. May react dangerously with: strong oxidising agents, strong acids, sulphur (in the presence of heat).
BUTANOL:	reacts violently developing heat with: aluminium, strong oxidising agents, strong reducing agents, hydrochloric acid. Forms explosive mixtures with the air.
1-METHOXY-2-PROPANOL:	can react dangerously with strong oxidising agents and strong acids.
4-METHYLPENTAN-2-ONE:	can react violently with oxidising agents. In the presence of air it forms peroxides. Forms explosive mixtures with air when hot.
N-BUTYL ACETATE:	risk of explosion on contact with: strong oxidising agents. Can react dangerously with alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with the air.

# **Conditions** As the product decomposes even at ambient temperature, it must be stored and used at a controlled temperature. Avoid violent blows.

BUTANOL:	avoid exposure to sources of heat and naked flames.	
1-METHOXY-2-PROPANOL:	avoid exposure to the air.	
4-METHYLPENTAN-2-ONE:	avoid exposure to sources of heat.	
N-BUTYL ACETATE:	avoid exposure to moisture, sources of heat and naked flames.	

# Incompatible materials.

1-METHOXY-2-PROPANOL:	oxidising agents, strong acids and alkaline metals.
4-METHYLPENTAN-2-ONE:	oxidising substances, reducing substances.
N-BUTYL ACETATE:	water, nitrates, strong oxidising agents, acids and alkalis and potassium tert- butoxide.

Hazardous Information not available. decomposition products.



#### SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects:

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product must be handled carefully because of its possible teratogenic effects, which may be toxic and damage the foetus development.

The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory trait. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

**TOLUENE:** it has a toxic effect on the central and peripheral nervous system (with encephalopathies and polyneuritis). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

1-METHOXY-2-PROPANOL: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.

**N-BUTYL** in humans the substance's vapours cause irritation to the eues and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with driness and flaking of the skin) and keratitis.

TOLUENE	LD50 (Oral). 5580 mg/kg Rat
	LD50 (Dermal). 12124 mg/kg Rabbit
	LC50 (Inhalation). 28.1 mg/l/4h Rat
BUTANOL	LD50 (Oral). 790 mg/kg Rat
	LD50 (Dermal). 3400 mg/kg Rabbit
	LC50 (Inhalation). 8000 ppm/4h Rat
1-METHOXY-2-PROPANOL	LD50 (Oral). 5300 mg/kg Rat
	LD50 (Dermal). 13000 mg/kg Rabbit
	LC50 (Inhalation). 54.6 mg/l/4h Rat
PROPAN-2-OL	LD50 (Oral). 4710 mg/kg Rat
	LD50 (Dermal). 12800 mg/kg Rat
	LC50 (Inhalation). 72.6 mg/l/4h Rat
4-METHYLPENTAN-2-ONE	LD50 (Oral). 2080 mg/kg Rat
	LD50 (Dermal). > 16000 mg/kg Rabbit
	LC50 (Inhalation). > 8.2 mg/l/4h Rat
N-BUTYL ACETATE	LD50 (Oral). > 6400 mg/kg Rat
	LD50 (Dermal). > 5000 mg/kg Rabbit
	LC50 (Inhalation). 21.1 mg/l/4h Rat

potential:

effects:



Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

Toxicity:	No data available
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**Persistence and** No data available. **degradability:** 

**Bioaccumulative** No data available.

Mobility in soil: No data available.

**Results of PBT and vPvB assessment:** On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

Other adverse No data available.

## SECTION 13: DISPOSAL INFORMATION

Waste treatment<br/>methodsReuse, when possible. Product residues should be considered special hazardous waste. The<br/>hazard level of waste containing this product should be evaluated according to applicable<br/>regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

**Contaminated Packaging** Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14: TRANSPORT INFORMATION

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:	*
ADR/RID Class:	3
UN:	1263
Packing Group:	II
Label:	3
Nr. Kemler:	33
Limited Quantity.	5 L
Tunnel restriction code.	(D/E)

Proper Shipping Name: PAINT or PAINT RELATED MATERIAL



SECTION 14:	TRANSPORT INFORMATION (Cont.)
Carriage by sea (shipping):	
IMO Class:	3
UN:	1263
Packing Group:	II
Label:	3
EMS:	F-E, S-E
Marine Pollutant.	NO
Proper Shipping Name:	PAINT or PAINT RELATED MATERIAL
Transport by air:	
IATA:	3
UN:	263
Packing Group:	II
Label:	3
Cargo:	
Packaging instructions:	364 Maximum quantity: 60 L
Pass.:	
Packaging instructions:	353 Maximum quantity: 5 L
Special Instructions:	A3, A72, A192

Proper Shipping Name: PAINT or PAINT RELATED MATERIAL.



#### **SECTION 15: REGULATORY INFORMATION** Safety, health and environmental regulations/legislation specific for the substance or mixture Seveso category. 7b Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006. Product. Point. 3 - 40Contained substance. 48 TOLUENE Point. Substances in Candidate None. List (Art. 59 REACH). Substances subject to None. authorisation (Annex XIV REACH). Substances subject to None. exportation reporting pursuant to (EC) Reg. 649/2012: Substances subject to the None. **Rotterdam Convention:** Substances subject to the None. Stockholm Convention: Healthcare controls. Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected. Chemical safety assessment No chemical safety assessment has been processed for the mixture and the substances it contains. **SECTION 16: OTHER INFORMATION** Text of hazard (H) indications mentioned in section 2-3 of the sheet: Flammable liquid, category 2 Flam. Liq. 2 Flammable liquid, category 3 Flam. Liq. 3 Reproductive toxicity, category 2 Repr. 2 Acute Tox. 4 Acute toxicity, category 4 Asp. Tox. 1 Aspiration hazard, category 1 STOT RE 2 Specific target organ toxicity - repeated exposure, category 2 Serious eye damage, category 1 Eye Dam. 1 Eye Irrit. 2 Eye irritation, category 2

Skin Irrit. 2 Skin irritation, category 2



STOT SE 3	Specific target organ toxicity - single exposure, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
	Text of risk (R) phrases mentioned in section 2-3 of the sheet:
R10	FLAMMABLE.
R11	HIGHLY FLAMMABLE.
R20	HARMFUL BY INHALATION.
R22	HARMFUL IF SWALLOWED.
R36	IRRITATING TO EYES.
R36/37	IRRITATING TO EYES AND RESPIRATORY SYSTEM.
R36/38	IRRITATING TO EYES AND SKIN.
R37/38	IRRITATING TO RESPIRATORY SYSTEM AND SKIN.
R38	IRRITATING TO SKIN.
R41	RISK OF SERIOUS DAMAGE TO EYES.
R48/20	HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.
Repr. Cat. 3	Reproductive toxicity, development, category 3.
R63	POSSIBLE RISK OF HARM TO THE UNBORN CHILD.
R65	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
R66	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.



# Legend:

	-
ADR:	European Agreement concerning the carriage of Dangerous goods by Road
CAS NUMBER:	Chemical Abstract Service Number
<b>CE50</b> :	Effective concentration (required to induce a 50% effect)
CE NUMBER:	Identifier in ESIS (European archive of existing substances)
CLP:	EC Regulation 1272/2008
DNEL:	Derived No Effect Level
EmS:	Emergency Schedule
GHS:	Globally Harmonized System of classification and labeling of chemicals
IATA DGR:	International Air Transport Association Dangerous Goods Regulation
IC50:	Immobilization Concentration 50%
IMDG:	International Maritime Code for dangerous goods
IMO:	International Maritime Organization
INDEX NUMBER:	Identifier in Annex VI of CLP
LC50:	Lethal Concentration 50%
LD50:	Lethal dose 50%
OEL:	Occupational Exposure Level
PBT:	Persistent bioaccumulative and toxic as REACH Regulation
PEC:	Predicted environmental Concentration
PEL:	Predicted exposure level
PNEC:	Predicted no effect concentration
REACH:	EC Regulation 1907/2006
RID:	Regulation concerning the international transport of dangerous goods by train
TLV:	Threshold Limit Value
TLV CEILING:	Concentration that should not be exceeded during any time of occupational exposure.
TWA STEL:	Short-term exposure limit
TWA:	Time-weighted average exposure limit
VOC:	Volatile organic Compounds
vPvB:	Very Persistent and very Bioaccumulative as for REACH Regulation
WGK:	Water hazard classes (German).
	This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.



To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist