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[Sadolin PV67 Heavy Duty Varnish](#)



Safety Data Sheet

Sadolin PV 67 - Varnish

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010 - United Kingdom (UK)

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

1.1 Product identifier

Product name : Sadolin PV 67 - Varnish
Product identity : 5828738
Product type : Varnish.

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

Field of application : A two pack acid curing coating for timber surfaces. Apply by brush or roller after mixing with PV67 Hardener. See container for details.
Identified uses : Consumer applications.

1.3 Details of the supplier of the safety data sheet

Company details : Sadolin
Crown Paints
Crown House
Hollins Rd
Darwen
Lancs, BB3 0BG
Tel: 01254 704951
Fax: 01254 702678
www.crownpaint.co.uk

Date of issue : 12 February 2015
Date of previous issue : 12 January 2015.

1.4 Emergency telephone number

01254 704951 (08.00-17.00)

Contact Person:
Product SHE Information Manager
SHE@crownpaints.co.uk

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

FLAMMABLE LIQUIDS - Category 2
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

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

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

Classification : R11
Xn; R20/21/22
Xi; R36

See Section 16 for the full text of the R-phrases declared above.

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

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.
Causes serious eye damage.
Causes skin irritation.
May cause drowsiness or dizziness.

Precautionary statements :

SECTION 2: Hazards identification

General :	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention :	Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Response :	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage :	Keep cool. Store locked up.
Disposal :	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients :	n-butyl acetate butan-1-ol xylene
Supplemental label elements :	Contains formaldehyde. May produce an allergic reaction.

Special packaging requirements

Containers to be fitted with child-resistant fastenings :	Not applicable.
Tactile warning of danger :	<input checked="" type="checkbox"/> Yes, applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1	<15	R10 R66, R67	Flam. Liq. 3, H226 STOT SE 3, H336 (Narcotic effects)	[1]
butan-1-ol	CAS: 123-86-4 Index: 607-025-00-1 REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	>=7 - <10	R10 Xn; R22 Xi; R41, R37/38 R67	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	>=5 - <10	R10 Xn; R20/21 Xi; R38	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1	<15	R10 R67	Flam. Liq. 3, H226 STOT SE 3, H336 (Narcotic effects)	[1] [2]
ethylbenzene	CAS: 107-98-2 Index: 603-064-00-3 REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	>=1 - <3	F; R11 Xn; R20, R48/20, R65 See Section 16 for the full text of the R-phrases declared above.	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (ears) Asp. Tox. 1, H304 See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit, see section 8.
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern

SECTION 4: First aid measures

4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 5 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and get medical attention immediately.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	Causes serious eye damage.
Inhalation :	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin contact :	Causes skin irritation.
Ingestion :	Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact :	Adverse symptoms may include the following: pain watering redness
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion :	Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used : waterjet.
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5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides

5.3 Advice for firefighters

SECTION 5: Firefighting measures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not reuse container.

Never use pressure to empty; the container is not a pressure vessel. Always keep in the same material as the supply container. Good housekeeping standards and regular safe removal of waste materials will minimise risks of spontaneous combustion and other fire hazards. The Manual Handling Operations Regulations may apply to the handling of containers of this product. Packs with a volume content of 5 litres or more may be marked with a maximum gross weight. To assist employers the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity (relative density) value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

Storage : Do not store below the following temperature: 5 °C

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
n-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 966 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m ³ 8 hours. TWA: 150 ppm 8 hours.
butan-1-ol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 154 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
xylene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
ethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 1920 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours.
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 560 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 552 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.

Recommended monitoring procedures

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

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls**Appropriate engineering controls**

All engineering control measures used to control exposure to hazardous substances must be selected, maintained, examined and tested to meet the requirements of the Control Of Substances Hazardous to Health regulations (COSHH). Similarly all personal protective equipment, including respiratory protective equipment, must be selected, issued and maintained to meet the requirements of COSHH. These requirements include the provision of any necessary information, instruction and training with regard to their use. Special precautions should be taken during surface preparation of pre-1960's paint surfaces over wood and metal as they may contain harmful lead.

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of solvent vapour below the relevant workplace exposure limits, suitable respiratory protection should be worn. (See personal protection below). Dry sanding, flame cutting and/ or welding of the dry paint film will give rise to dust and/ or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be worn.

Individual protection measures

- General : Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
- Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

SECTION 8: Exposure controls/personal protection

Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Hand protection :	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances. Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice: Recommended: Silver Shield / 4H gloves, polyvinyl alcohol (PVA), Viton® May be used: nitrile rubber, neoprene rubber, butyl rubber Not recommended: natural rubber (latex), polyvinyl chloride (PVC)
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
Respiratory protection :	If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Odour :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	Testing not relevant or not possible due to nature of the product.
Boiling point/boiling range :	145°C
Flash point :	☑ Closed cup: -18 - 23°C (-0.4 - 73.4°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Highly flammable in the presence of the following materials or conditions: heat. Flammable in the presence of the following materials or conditions: oxidizing materials.
Upper/lower flammability or explosive limits :	0.8 - 19 vol %
Vapour pressure :	Testing not relevant or not possible due to nature of the product.
Vapour density :	Testing not relevant or not possible due to nature of the product.
Relative density :	0.98 g/cm ³
Solubility(ies) :	Easily soluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	450 x 10 ⁻⁶ m ² /s Kinematic viscosity at 40°C
Explosive properties :	Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Explosive in the presence of the following materials or conditions: oxidizing materials. Slightly explosive in the presence of the following materials or conditions: reducing materials.
Oxidising properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 39 %
Water % by weight :	Weighted average: 0 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.

Reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

The product has been assessed following the conventional method and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short term and long term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21 mg/l	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
butan-1-ol	LC50 Inhalation Vapour	Rat	24000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
1-methoxy-2-propanol	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Acute toxicity estimates

Route	ATE value
Oral	8186.5 mg/kg
Dermal	12941.2 mg/kg
Inhalation (gases)	49288.1 ppm
Inhalation (vapours)	110.2 mg/l

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure
n-butyl acetate	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Eyes - Mild irritant	Rabbit	-	-
	Respiratory - Mild irritant	Rabbit	-	-
butan-1-ol	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams
xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams
ethylbenzene	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
	Respiratory - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information**12.1 Toxicity**

Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute EC50 44 mg/l	Daphnia	48 hours
butan-1-ol	Acute EC50 1328 mg/l	Daphnia	96 hours
	Acute LC50 1.376 mg/l	Fish	96 hours
1-methoxy-2-propanol	Acute EC50 23300 mg/l	Daphnia - Daphnia magna (Water flea)	48 hours
	Acute LC50 6812 mg/l	Fish - Leuciscus idus	96 hours
ethylbenzene	Chronic NOEC <1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	-	90 % - Readily - 28 days	-	-
butan-1-ol	OECD 301D Ready Biodegradability - Closed Bottle Test	92 % - 20 days	-	-
xylene	-	>60 % - Readily - 28 days	-	-
ethylbenzene	-	>70 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate	-	-	Readily
butan-1-ol	-	-	Readily
xylene	-	-	Readily
ethylbenzene	-	-	Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
n-butyl acetate	2.3	-	low
butan-1-ol	1	3.16	low
xylene	3.12	8.1 - 25.9	low
1-methoxy-2-propanol	<1	-	low
ethylbenzene	3.6	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : No known data available in our database.

Mobility : No known data available in our database.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

The generation of waste should be avoided or minimised wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue (EWC) : 08 01 11*




Packaging

Used containers, drained and/ or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with EWC code: 15 01 10*.

If mixed with other wastes, the above waste code may not be applicable.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	1263	PAINT (n-butyl acetate)	3 	II	No.	Special provisions 640 (C) Tunnel code (D/E)
IMDG Class	1263	PAINT (n-butyl acetate)	3 	II	No.	Emergency schedules (EmS) F-E, S-E
IATA Class	1263	PAINT (n-butyl acetate)	3 	II	No.	-

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

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

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorisation - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

This product is controlled under the Seveso III Directive.

Seveso category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b
C7b: Highly flammable (R11)

National regulations**15.2 Chemical Safety Assessment**

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated R phrases :

R11- Highly flammable.
R10- Flammable.
R20- Harmful by inhalation.
R22- Harmful if swallowed.
R20/21- Harmful by inhalation and in contact with skin.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65- Harmful: may cause lung damage if swallowed.
R41- Risk of serious damage to eyes.
R36- Irritating to eyes.
R38- Irritating to skin.
R37/38- Irritating to respiratory system and skin.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.

Full text of classifications [DSD/DPD] :

F - Highly flammable
Xn - Harmful
Xi - Irritant

Full text of abbreviated H statements :

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302 (oral)	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312 (dermal)	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332 (inhalation)	Harmful if inhaled.
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
H373 (ears)	May cause damage to organs through prolonged or repeated exposure. (ears)

Full text of classifications [CLP/GHS] :

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2, H373 (ears)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (ears) - Category 2

SECTION 16: Other information

STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

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

Classification	Justification
FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	On basis of test data Calculation method Calculation method Calculation method

UK REGULATORY REFERENCES:

The products are classified and supplied in accordance with the Chemicals (Hazard Information Packaging for supply) regulations (CHIP). The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provision of the Health and Safety at Work Act and the Control of Substances Hazardous to Health regulations apply to the use of this product at work.

EU DIRECTIVES:

Dangerous Substance Directive 67/548/EEC. 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. Classification, labelling and packaging of substances and mixtures 1272/2008EC.

APPROVED CODE OF PRACTICE:

Approved classification and labelling guide (Sixth edition) The compilation of safety data sheets (Third edition).

GUIDANCE NOTES:

Workplace Exposure Limits EH40. Storage of Flammable Liquids in Containers, HS(G)51 Storage of Packaged Dangerous Substances, HS(G)71.

NATIONAL REGULATIONS:

The Control Of Substances Hazardous to Health regulations (as amended) The Manual Handling Operations regulations (as amended) The Environmental Protection (Duty of Care) regulations (as amended) The Chemicals (Hazard Information and Packaging) for supply regulations (as amended) The Health and Safety at Work act 1974 (as amended).

Notice to reader

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.