

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

1.1. Product identifier

Trade name or designation of the mixture Dykem® Transparent Stain Aerosol - Steel Blue

Registration number -

Synonyms FORMULA CODE(S): * Steel Blue (8703A)

Part Number Steel Blue (80000)

Issue date 13-January-2022

Version number 01

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

Identified uses Staining colors

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name ITW Performance Polymers

Address Bay 150
Shannon Industrial Estate
Shannon, CO. Clare
Ireland V14 DF82

Telephone 353 (61) 771 500

353 (61) 471 285

In Case of Emergency +44(0)1235 239 670 (24h)

Email mail@itwpp.com

Manufacturer

Company name ITW Pro Brands

Address 805 E. Old 56 Highway
Olathe, KS 66061

Country (U.S.A.)

Tel: +1 800-443-9536

In Case of Emergency +1 800-535-5053 (Infotrac)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable gases	Category 1A	H220 - Extremely flammable gas.
Aerosols	Category 1	H229 - Pressurized container: May burst if heated. H222 - Extremely flammable aerosol.

Health hazards

Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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Hazard summary

Contents under pressure. Heat may cause the containers to explode. Causes serious eye damage. May cause drowsiness or dizziness. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:

Basic Violet 1, Butanol Normal, Butyl acetate, Cellulose Nitrate, Diacetone alcohol, Ethanol, Isopropanol, Malachite Green Oxalate, Oxidized Castor Oil, Petroleum gases, liquefied, sweetened; Petroleum gas [complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having, Propyl acetate, Shellac

Hazard pictograms



Signal word

Danger

Hazard statements

H220	Extremely flammable gas.
H229	Pressurized container: May burst if heated.
H411	Toxic to aquatic life with long lasting effects.
H222	Extremely flammable aerosol.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Precautionary statements

Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing gas.
P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection.

Response

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE/doctor.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381	In case of leakage, eliminate all ignition sources.
P391	Collect spillage.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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Supplemental label information

EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Ethanol	30 - 40	64-17-5 200-578-6	-	603-002-00-5	
Classification: Flam. Liq. 2;H225					
Butyl acetate	20 - 30	123-86-4 204-658-1	-	607-025-00-1	#
Classification: Flam. Liq. 3;H226, STOT SE 3;H336					

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Petroleum gases, liquefied, sweetened; Petroleum gas [complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having	20 - 30	68476-86-8 270-705-8	-	649-203-00-1	
		Classification: Press. Gas;H280, Muta. 1B;H340, Carc. 1A;H350			K,S,U
Butanol Normal	5 - 10	71-36-3 200-751-6	-	603-004-00-6	
		Classification: Flam. Liq. 3;H226, Acute Tox. 4;H302;(ATE: 500 mg/kg), Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335;H336			
Cellulose Nitrate	1 - 3	9004-70-0 -	-	603-037-00-6	
		Classification: -			T
Diacetone alcohol	1 - 3	123-42-2 204-626-7	-	603-016-00-1	
		Classification: Eye Irrit. 2;H319			
Isopropanol	1 - 3	67-63-0 200-661-7	01-2119457558-25-XXXX	603-117-00-0	
		Classification: Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336			
Propyl acetate	1 - 3	109-60-4 203-686-1	-	607-024-00-6	
		Classification: Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336			C
Shellac	1 - 3	9000-59-3 232-549-9	-	-	
		Classification: -			
Basic Violet 1	0,1 - 1	8004-87-3 281-506-0	-	-	
		Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg), Skin Irrit. 2;H315, Eye Irrit. 2;H319, Carc. 2;H351, Aquatic Chronic 1;H410(M=10)			
Malachite Green Oxalate	0,1 - 1	2437-29-8 219-441-7	-	602-096-00-5	
		Classification: Acute Tox. 4;H302;(ATE: 500 mg/kg), Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410			
Oxidized Castor Oil	0,1 - 1	68187-84-8 269-128-4	-	-	
		Classification: -			

List of abbreviations and symbols that may be used above

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note K: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8).

Note S: This substance may not require a label according to Article 17 (see section 1.3 of Annex I) (Table 3.1). This substance may not require a label according to Article 23 of Directive 67/548/EEC (see section 8 of Annex VI to that Directive) (Table 3.2).

Note U: When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

Composition comments

The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
4.1. Description of first aid measures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	In the unlikely event of swallowing contact a physician or poison control centre. Rinse mouth.
4.2. Most important symptoms and effects, both acute and delayed	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing.
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	Extremely flammable aerosol.
5.1. Extinguishing media	
Suitable extinguishing media	Alcohol resistant foam. Dry powder. Carbon dioxide (CO ₂).
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	Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Special fire fighting procedures	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	Keep unnecessary personnel away. Avoid breathing gas. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Scoop up used absorbent into drums or other appropriate container. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not get this material in contact with eyes. Avoid breathing gas. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from heat, sparks and open flame. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
Butanol Normal (CAS 71-36-3)	MAK	150 mg/m ³
		50 ppm
	STEL	600 mg/m ³
Butyl acetate (CAS 123-86-4)	Ceiling	200 ppm
		480 mg/m ³
	MAK	100 ppm
Diacetone alcohol (CAS 123-42-2)	MAK	241 mg/m ³
		100 ppm
	MAK	240 mg/m ³
Ethanol (CAS 64-17-5)	Ceiling	50 ppm
		3800 mg/m ³
	MAK	2000 ppm
Isopropanol (CAS 67-63-0)	MAK	1900 mg/m ³
		1000 ppm
	STEL	500 mg/m ³
Propyl acetate (CAS 109-60-4)	MAK	200 ppm
		2000 mg/m ³
	Ceiling	800 ppm
	MAK	420 mg/m ³
		100 ppm
	MAK	420 mg/m ³
	100 ppm	

Belgium. Exposure Limit Values

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	62 mg/m ³
		20 ppm
Butyl acetate (CAS 123-86-4)	STEL	712 mg/m ³
		150 ppm
	TWA	238 mg/m ³
	50 ppm	

Belgium. Exposure Limit Values

Components	Type	Value
Diacetone alcohol (CAS 123-42-2)	TWA	241 mg/m ³
		50 ppm
Ethanol (CAS 64-17-5)	TWA	1907 mg/m ³
		1000 ppm
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m ³
		400 ppm
	TWA	500 mg/m ³
		200 ppm
Propyl acetate (CAS 109-60-4)	STEL	1055 mg/m ³
		250 ppm
	TWA	847 mg/m ³
		200 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	150 mg/m ³
	TWA	100 mg/m ³
Butyl acetate (CAS 123-86-4)	STEL	950 mg/m ³
	TWA	710 mg/m ³
Ethanol (CAS 64-17-5)	TWA	1000 mg/m ³
Isopropanol (CAS 67-63-0)	STEL	1225 mg/m ³
	TWA	980 mg/m ³

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	154 mg/m ³
		50 ppm
Butyl acetate (CAS 123-86-4)	MAC	241 mg/m ³
		50 ppm
	STEL	723 mg/m ³
Diacetone alcohol (CAS 123-42-2)		150 ppm
	MAC	241 mg/m ³
	STEL	362 mg/m ³
Ethanol (CAS 64-17-5)		75 ppm
	MAC	1900 mg/m ³
		1000 ppm
Isopropanol (CAS 67-63-0)	MAC	999 mg/m ³
		400 ppm
	STEL	1250 mg/m ³
		500 ppm
Propyl acetate (CAS 109-60-4)	MAC	849 mg/m ³
		200 ppm
	STEL	1060 mg/m ³
		250 ppm

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	150 mg/m3
		50 ppm
Butyl acetate (CAS 123-86-4)	TWA	710 mg/m3
		150 ppm
Isopropanol (CAS 67-63-0)	TWA	980 mg/m3
		400 ppm
Propyl acetate (CAS 109-60-4)	TWA	840 mg/m3
		200 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
Butanol Normal (CAS 71-36-3)	Ceiling	600 mg/m3
	TWA	300 mg/m3
Butyl acetate (CAS 123-86-4)	Ceiling	1200 mg/m3
	TWA	950 mg/m3
Diacetone alcohol (CAS 123-42-2)	Ceiling	300 mg/m3
	TWA	200 mg/m3
Ethanol (CAS 64-17-5)	Ceiling	3000 mg/m3
	TWA	1000 mg/m3
Isopropanol (CAS 67-63-0)	Ceiling	1000 mg/m3
	TWA	500 mg/m3
Propyl acetate (CAS 109-60-4)	Ceiling	1000 mg/m3
	TWA	800 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
Butanol Normal (CAS 71-36-3)	Ceiling	150 mg/m3
		50 ppm
Butyl acetate (CAS 123-86-4)	TLV	710 mg/m3
		150 ppm
Diacetone alcohol (CAS 123-42-2)	TLV	240 mg/m3
		50 ppm
Ethanol (CAS 64-17-5)	TLV	1900 mg/m3
		1000 ppm
Isopropanol (CAS 67-63-0)	TLV	490 mg/m3
		200 ppm
Propyl acetate (CAS 109-60-4)	TLV	625 mg/m3
		150 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	90 mg/m3
		30 ppm
	TWA	45 mg/m3
		15 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
Diacetone alcohol (CAS 123-42-2)	STEL	240 mg/m3 50 ppm
	TWA	120 mg/m3 25 ppm
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3 1000 ppm
	TWA	1000 mg/m3 500 ppm
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3 250 ppm
	TWA	350 mg/m3 150 ppm

Finland. Workplace Exposure Limits Components

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	230 mg/m3 75 ppm
	TWA	150 mg/m3 50 ppm
Butyl acetate (CAS 123-86-4)	STEL	725 mg/m3 150 ppm
	TWA	240 mg/m3 50 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	360 mg/m3 75 ppm
	TWA	240 mg/m3 50 ppm
Ethanol (CAS 64-17-5)	STEL	2500 mg/m3 1300 ppm
	TWA	1900 mg/m3 1000 ppm
Isopropanol (CAS 67-63-0)	STEL	620 mg/m3 250 ppm
	TWA	500 mg/m3 200 ppm
Propyl acetate (CAS 109-60-4)	STEL	850 mg/m3 200 ppm
	TWA	420 mg/m3 100 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984 Components

Components	Type	Value
Butanol Normal (CAS 71-36-3)	VLE	150 mg/m3 50 ppm
	Regulatory status: Indicative limit (VL)	
	Regulatory status: Indicative limit (VL)	

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
Butyl acetate (CAS 123-86-4)	VLE	940 mg/m3
Regulatory status:	Indicative limit (VL)	
		200 ppm
Regulatory status:	Indicative limit (VL)	
	VME	710 mg/m3
Regulatory status:	Indicative limit (VL)	
		150 ppm
Regulatory status:	Indicative limit (VL)	
Diacetone alcohol (CAS 123-42-2)	VME	240 mg/m3
Regulatory status:	Indicative limit (VL)	
		50 ppm
Regulatory status:	Indicative limit (VL)	
Ethanol (CAS 64-17-5)	VLE	9500 mg/m3
Regulatory status:	Indicative limit (VL)	
		5000 ppm
Regulatory status:	Indicative limit (VL)	
	VME	1900 mg/m3
Regulatory status:	Indicative limit (VL)	
		1000 ppm
Regulatory status:	Indicative limit (VL)	
Isopropanol (CAS 67-63-0)	VLE	980 mg/m3
Regulatory status:	Indicative limit (VL)	
		400 ppm
Regulatory status:	Indicative limit (VL)	
Propyl acetate (CAS 109-60-4)	VME	840 mg/m3
Regulatory status:	Indicative limit (VL)	
		200 ppm
Regulatory status:	Indicative limit (VL)	

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	310 mg/m3
		100 ppm
Butyl acetate (CAS 123-86-4)	TWA	480 mg/m3
		100 ppm
Diacetone alcohol (CAS 123-42-2)	TWA	96 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	TWA	380 mg/m3
		200 ppm
Isopropanol (CAS 67-63-0)	TWA	500 mg/m3
		200 ppm
Propyl acetate (CAS 109-60-4)	TWA	420 mg/m3
		100 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
Butanol Normal (CAS 71-36-3)	AGW	310 mg/m3

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
Butyl acetate (CAS 123-86-4)	AGW	100 ppm
		300 mg/m ³
Diacetone alcohol (CAS 123-42-2)	AGW	62 ppm
		96 mg/m ³
Ethanol (CAS 64-17-5)	AGW	20 ppm
		380 mg/m ³
Isopropanol (CAS 67-63-0)	AGW	200 ppm
		500 mg/m ³
		200 ppm

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	300 mg/m ³
		100 ppm
		300 mg/m ³
Butyl acetate (CAS 123-86-4)	STEL	100 ppm
		950 mg/m ³
		200 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	710 mg/m ³
		150 ppm
		360 mg/m ³
Ethanol (CAS 64-17-5)	TWA	75 ppm
		240 mg/m ³
		50 ppm
Isopropanol (CAS 67-63-0)	TWA	1900 mg/m ³
		1000 ppm
		1225 mg/m ³
Propyl acetate (CAS 109-60-4)	STEL	500 ppm
		980 mg/m ³
		400 ppm
Butyl acetate (CAS 123-86-4)	STEL	1050 mg/m ³
		250 ppm
		840 mg/m ³
Isopropanol (CAS 67-63-0)	TWA	200 ppm
		500 ppm
		500 mg/m ³

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	90 mg/m ³
		45 mg/m ³
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m ³
		241 mg/m ³
Ethanol (CAS 64-17-5)	STEL	3800 mg/m ³
		1900 mg/m ³
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m ³
		500 mg/m ³

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
Propyl acetate (CAS 109-60-4)	STEL	840 mg/m3
	TWA	420 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	150 mg/m3
		50 ppm
	TWA	80 mg/m3
Butyl acetate (CAS 123-86-4)	TWA	25 ppm
		700 mg/m3
Diacetone alcohol (CAS 123-42-2)	TWA	150 ppm
		240 mg/m3
Ethanol (CAS 64-17-5)	TWA	50 ppm
		1900 mg/m3
Isopropanol (CAS 67-63-0)	TWA	1000 ppm
		490 mg/m3
Propyl acetate (CAS 109-60-4)	TWA	200 ppm
		625 mg/m3
		150 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	20 ppm
Butyl acetate (CAS 123-86-4)	STEL	950 mg/m3
		200 ppm
	TWA	710 mg/m3
Diacetone alcohol (CAS 123-42-2)	TWA	150 ppm
		240 mg/m3
Ethanol (CAS 64-17-5)	TWA	50 ppm
		1000 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
Propyl acetate (CAS 109-60-4)	STEL	150 ppm
	TWA	100 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	20 ppm
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3
		150 ppm
	TWA	241 mg/m3
Diacetone alcohol (CAS 123-42-2)	TWA	50 ppm
		50 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
Propyl acetate (CAS 109-60-4)	TWA	200 ppm
	STEL	150 ppm
	TWA	100 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	10 mg/m3
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3
		150 ppm
	TWA	241 mg/m3
		50 ppm
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
	TWA	350 mg/m3
Propyl acetate (CAS 109-60-4)	TWA	200 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
Butanol Normal (CAS 71-36-3)	Ceiling	90 mg/m3
		30 ppm
	TWA	45 mg/m3
		15 ppm
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3
		150 ppm
	TWA	241 mg/m3
		50 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	240 mg/m3
		50 ppm
	TWA	120 mg/m3
		25 ppm
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm
	TWA	1000 mg/m3
		500 ppm
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm
Propyl acetate (CAS 109-60-4)	STEL	800 mg/m3
		200 ppm
	TWA	420 mg/m3
		100 ppm

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
		150 ppm

Netherlands. OELs (binding)

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
	TWA	260 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
Butanol Normal (CAS 71-36-3)	Ceiling	75 mg/m3
		25 ppm
Diacetone alcohol (CAS 123-42-2)	TLV	120 mg/m3
		25 ppm
Ethanol (CAS 64-17-5)	TLV	950 mg/m3
		500 ppm
Isopropanol (CAS 67-63-0)	TLV	245 mg/m3
		100 ppm
Propyl acetate (CAS 109-60-4)	TLV	420 mg/m3
		100 ppm

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	150 mg/m3
		0 ppm
	TWA	50 mg/m3
		0 ppm
Butyl acetate (CAS 123-86-4)	STEL	720 mg/m3
		0 ppm
	TWA	240 mg/m3
		0 ppm
Diacetone alcohol (CAS 123-42-2)	TWA	240 mg/m3
		0 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		0 ppm
Isopropanol (CAS 67-63-0)	STEL	1200 mg/m3
		0 ppm
	TWA	900 mg/m3
		0 ppm
Propyl acetate (CAS 109-60-4)	STEL	400 mg/m3
		0 ppm
	TWA	200 mg/m3
		0 ppm

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3
		150 ppm

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
	TWA	241 mg/m ³
		50 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	20 ppm
Butyl acetate (CAS 123-86-4)	STEL	200 ppm
	TWA	150 ppm
Diacetone alcohol (CAS 123-42-2)	TWA	50 ppm
Ethanol (CAS 64-17-5)	TWA	1000 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
Propyl acetate (CAS 109-60-4)	STEL	250 ppm
	TWA	200 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	200 mg/m ³
		66 ppm
	TWA	100 mg/m ³
		33 ppm
Butyl acetate (CAS 123-86-4)	STEL	950 mg/m ³
		200 ppm
	TWA	715 mg/m ³
		150 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	250 mg/m ³
		53 ppm
	TWA	150 mg/m ³
		32 ppm
Ethanol (CAS 64-17-5)	STEL	9500 mg/m ³
		5000 ppm
	TWA	1900 mg/m ³
		1000 ppm
Isopropanol (CAS 67-63-0)	STEL	500 mg/m ³
		203 ppm
	TWA	200 mg/m ³
		81 ppm
Propyl acetate (CAS 109-60-4)	STEL	600 mg/m ³
		144 ppm
	TWA	400 mg/m ³
		96 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	310 mg/m ³
		100 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3 150 ppm
	TWA	241 mg/m3 50 ppm
Ethanol (CAS 64-17-5)	STEL	1920 mg/m3 1000 ppm
	TWA	960 mg/m3 500 ppm
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3 400 ppm
	TWA	500 mg/m3 200 ppm
Propyl acetate (CAS 109-60-4)	STEL	800 mg/m3 200 ppm
	TWA	400 mg/m3 100 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
Butanol Normal (CAS 71-36-3)	TWA	310 mg/m3 100 ppm
	TWA	300 mg/m3 62 ppm
Diacetone alcohol (CAS 123-42-2)	TWA	96 mg/m3 20 ppm
	TWA	960 mg/m3 500 ppm
Isopropanol (CAS 67-63-0)	TWA	500 mg/m3 200 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	154 mg/m3 50 ppm
	TWA	61 mg/m3 20 ppm
Butyl acetate (CAS 123-86-4)	STEL	965 mg/m3 200 ppm
	TWA	724 mg/m3 150 ppm
Diacetone alcohol (CAS 123-42-2)	TWA	241 mg/m3 50 ppm
	STEL	1910 mg/m3 1000 ppm
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3

Spain. Occupational Exposure Limits Components

Components	Type	Value
		400 ppm
	TWA	500 mg/m3
		200 ppm
Propyl acetate (CAS 109-60-4)	STEL	1060 mg/m3
		250 ppm
	TWA	849 mg/m3
		200 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7) Components

Components	Type	Value
Butanol Normal (CAS 71-36-3)	Ceiling	90 mg/m3
		30 ppm
	TWA	45 mg/m3
		15 ppm
Butyl acetate (CAS 123-86-4)	STEL	700 mg/m3
		150 ppm
	TWA	500 mg/m3
		100 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	240 mg/m3
		50 ppm
	TWA	120 mg/m3
		25 ppm
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm
	TWA	1000 mg/m3
		500 ppm
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz Components

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	310 mg/m3
		100 ppm
	TWA	310 mg/m3
		100 ppm
Butyl acetate (CAS 123-86-4)	STEL	720 mg/m3
		150 ppm
	TWA	240 mg/m3
		50 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	192 mg/m3
		40 ppm
	TWA	96 mg/m3
		20 ppm
Ethanol (CAS 64-17-5)	STEL	1920 mg/m3
		1000 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
Isopropanol (CAS 67-63-0)	TWA	960 mg/m3 500 ppm
	STEL	1000 mg/m3 400 ppm
Propyl acetate (CAS 109-60-4)	TWA	500 mg/m3 200 ppm
	STEL	840 mg/m3 200 ppm
	TWA	420 mg/m3 100 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Butanol Normal (CAS 71-36-3)	STEL	154 mg/m3 50 ppm
Butyl acetate (CAS 123-86-4)	STEL	966 mg/m3 200 ppm
	TWA	724 mg/m3 150 ppm
Diacetone alcohol (CAS 123-42-2)	STEL	362 mg/m3 75 ppm
	TWA	241 mg/m3 50 ppm
Ethanol (CAS 64-17-5)	TWA	1920 mg/m3 1000 ppm
Isopropanol (CAS 67-63-0)	STEL	1250 mg/m3 500 ppm
	TWA	999 mg/m3 400 ppm
Propyl acetate (CAS 109-60-4)	STEL	1060 mg/m3 250 ppm
	TWA	849 mg/m3 200 ppm

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
Butyl acetate (CAS 123-86-4)	STEL	723 mg/m3 150 ppm
	TWA	241 mg/m3 50 ppm

Biological limit values**Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)**

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	50 mg/l	Acetone	Urine	*
	50 mg/l	Acetone	Blood	*
	0,86 umol/l	Acetone	Urine	*

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling Time
	0,86 µmol/l	Acetone	Blood	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling Time
Butanol Normal (CAS 71-36-3)	2 mg/g	1-Butanol (nach Hydrolyse)	Creatinine in urine	*
	10 mg/g	1-Butanol (nach Hydrolyse)	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*
	25 mg/l	ACETON	Blood	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling Time
Butanol Normal (CAS 71-36-3)	3 µmol/mmol	n-butyl alcohol (with hydrolysis)	Creatinine in urine	*
	15 µmol/mmol	n-butyl alcohol (with hydrolysis)	Creatinine in urine	*
	2 mg/g	n-butyl alcohol (with hydrolysis)	Creatinine in urine	*
	10 mg/g	n-butyl alcohol (with hydrolysis)	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	25 µg/l	Acetone	Urine	*
	430 µmol/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling Time
Butanol Normal (CAS 71-36-3)	2 mg/g	N-Butyl Alcohol	Creatinine in urine	*
	10 mg/g	N-Butyl Alcohol	Creatinine in urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/l	Acetona	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
Butanol Normal (CAS 71-36-3)	2 mg/g	n-Butanol	Creatinine in urine	
	10 mg/g	n-Butanol	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*
	25 mg/l	ACETON	Blood	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Diacetone alcohol (CAS 123-42-2)

Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

- Hand protection

Wear appropriate chemical resistant gloves.

- Other

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls

Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may 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

Gas.

Form

Aerosol

Colour

Blue or Red.

Odour

Sweet. Solvent.

Melting point/freezing point

Not available.

Boiling point or initial boiling point and boiling range

76,67 - 125 °C (170 - 257 °F)

Flammability (solid, gas)

Flammable gas.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

1,4 %

Flammability limit - upper (%)

19 %

Flash point

11,7 °C (53,0 °F)

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

pH

Not available.

Solubility(ies)

Solubility (water)

Negligible

Partition coefficient (n-octanol/water)

Not available.

Vapour pressure

Not available.

Vapour density

> 1 (air = 1)

Relative density

Not available.

Particle characteristics

Not available.

Other safety characteristics

Evaporation rate	< 1 (BuAc = 1)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
VOC	8703A Dk Blue/Steel Blue: 95,59%, 808 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents. Alkali metals. Nitrates.
10.6. Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye damage.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Butyl acetate (CAS 123-86-4)		
Acute		
Inhalation		
LC50	Rat	> 21 mg/l, 4 Hours
Oral		
LD50	Rat	14000 mg/kg
Diacetone alcohol (CAS 123-42-2)		
Acute		
Oral		
LD50	Rat	3000 mg/kg
Ethanol (CAS 64-17-5)		
Acute		
Inhalation		
<i>Vapour</i>		
LC50	Rat	51 mg/l, 6 Hours
Isopropanol (CAS 67-63-0)		
Acute		
Inhalation		
LC50	-	51 mg/l, 8 Hours
Oral		
LD50	Rat	4,7 g/kg
Oxidized Castor Oil (CAS 68187-84-8)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours

Components	Species	Test Results
Oral LD50	Rat	> 2000 mg/kg
Propyl acetate (CAS 109-60-4)		
Acute		
Dermal LD50	Rabbit	> 18000 mg/kg, 24 Hours
Inhalation		
<i>Vapour</i>		
LC50	Rat	32 mg/l, 4 Hours
Oral LD50	Rat	8700 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	Chilean Spanish went out in Job 18-0024189, French and German were reviewed under 17-0023466 and Hindi under 17-0023485	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
ACGIH Carcinogens		
Isopropanol (CAS 67-63-0)	Not classifiable as a human carcinogen. A4	
Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)		
Petroleum gases, liquefied, sweetened; Petroleum gas [complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having (CAS 68476-86-8)		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not likely, due to the form of the product.	
Mixture versus substance information	No information available.	
11.2. Information on other hazards		
Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	
Other information	Symptoms may be delayed.	

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life with long lasting effects. Based on available data, the classification criteria are not met for hazardous to the aquatic environment, acute hazard.

Components	Species	Test Results
Basic Violet 1 (CAS 8004-87-3)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 0,047 mg/l, 96 hours
Butanol Normal (CAS 71-36-3)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 1897 - 2072 mg/l, 48 hours
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 100 - 500 mg/l, 96 hours

Components	Species	Test Results
Butyl acetate (CAS 123-86-4)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 17 - 19 mg/l, 96 hours
Diacetone alcohol (CAS 123-42-2)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 420 mg/l, 96 hours
Ethanol (CAS 64-17-5)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 7,7 - 11,2 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) 42 mg/l, 4 days
Isopropanol (CAS 67-63-0)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) > 1400 mg/l, 96 hours
Malachite Green Oxalate (CAS 2437-29-8)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Channel catfish (<i>Ictalurus punctatus</i>) 0,14 mg/l, 96 hours
Propyl acetate (CAS 109-60-4)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 56 - 64 mg/l, 96 hours

12.2. Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Butanol Normal	0,88
Butyl acetate	1,78
Diacetone alcohol	-0,098
Ethanol	-0,31
Isopropanol	0,05
Propyl acetate	1,24

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not established.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN1950
14.2. UN proper shipping name AEROSOLS, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
Hazard No. (ADR) Not available.
Tunnel restriction code D
14.4. Packing group Not available.
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number UN1950
14.2. UN proper shipping name AEROSOLS, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
14.4. Packing group Not available.
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number UN1950
14.2. UN proper shipping name AEROSOLS, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
14.4. Packing group Not available.
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN1950
14.2. UN proper shipping name Aerosols, flammable
14.3. Transport hazard class(es)
Class 2.1
Subsidiary risk -
14.4. Packing group Not available.
14.5. Environmental hazards No.
ERG Code 10L
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1950
14.2. UN proper shipping name Aerosols, flammable

14.3. Transport hazard class(es)

Class 2.1

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards

Marine pollutant No.

EmS F-D, S-U

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments Not applicable.

ADN; ADR; IATA; IMDG; RID



General information

IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

EU Regulation 648/2004, Annex VII, Content Labeling for Detergents

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Petroleum gases, liquefied, sweetened; Petroleum gas [complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having (CAS 68476-86-8)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Petroleum gases, liquefied, sweetened; Petroleum gas [complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having (CAS 68476-86-8)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Butanol Normal (CAS 71-36-3)

Butyl acetate (CAS 123-86-4)
Cellulose Nitrate (CAS 9004-70-0)
Ethanol (CAS 64-17-5)
Isopropanol (CAS 67-63-0)
Malachite Green Oxalate (CAS 2437-29-8)
Petroleum gases, liquefied, sweetened; Petroleum gas [complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having (CAS 68476-86-8)
Propyl acetate (CAS 109-60-4)

Other regulations The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended. Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

CAS: Chemical Abstract Service.

CEN: European Committee for Standardization.

IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MAC: Maximum Allowed Concentration.

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative and toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit.

TLV: Threshold Limit Value.

TWA: Time Weighted Average.

VLE: Exposure Limit Value.

VME: Exposure Average Value.

vPvB: Very persistent and very bioaccumulative.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H340 May cause genetic defects.

H350 May cause cancer.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

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