COLOROBBIA

SAFETY DATA SHEET

COLOROBBIA ITALIA S.P.A.			**HTL--000139**				
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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Italy

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

1.1 Product identifier

Product name : HTL--000139
UFI : E6H3-40NF-F00U-GT5Q

Product code : 000000000010057934
Other means of identification : HTL--000139-H009

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

Identified uses : Third firing decoration in the glass/ceramics/porcelain sectorsThird firing decoration in the glass/ceramics/porcelain sectors

Uses advised against
Not applicable.

1.3 Details of the supplier of the safety data sheet

COLOROBBIA ITALIA S.P.A.
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Località e Stato 50053 Sovigliana - Vinci (FI)
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tel. +39 0571 7091
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e-mail address of person responsible for this SDS : QHSE@colorobbia.it

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : +39 011 6637637 (Torino), +39 02 66101029 (Milano), +39 0382 24444; (Pavia). +39 049 8275078 (Padova), +390105636245 (Genova), +39055 4277238 (Firenze), +39 06 30.54343 (Roma), +39 06 49970698 (Roma), +39081 7472870 (Napoli)

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]
Skin Irrit. 2, H315
Eye Dam. 1, H318
Skin Sens. 1, H317
STOT SE 3, H335 (Respiratory tract irritation)
STOT RE 2, H373
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements 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 :
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

General : P103 - Read carefully and follow all instructions.P102 - Keep out of reach of children.P101 - If medical advice is needed, have product container or label at hand.

Prevention : P280 - Wear protective gloves. P280 - Wear eye or face protection. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P264 - Wash your hands thoroughly after use (especially parts of the body that may have been in contact with the product).

Response : P391 - Collect spillage. P314 - Get medical advice or attention if you feel unwell. P304 - IF INHALED: P304 + P312 - Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 - IF ON SKIN: P302 + P352 - Wash with plenty of water. P333 - If skin irritation or rash occurs: P333 + P313 - Get medical advice or attention. P305 - IF IN EYES: P305 + P351 + P338 - Rinse cautiously with water for

		several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305 + P310 - Immediately call a POISON CENTER or doctor.
Storage	:	P405 - Store locked up.P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	cyclohexanol bornan-2-one rosin turpentine, oil 4-methylpentan-2-one dodecane-1-thiol linalool dipentene cineole eugenol
Supplemental label elements	:	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirements		
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Yes, applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
cyclohexanol	EC : 203-630-6 CAS : 108-93-0	>= 10 - <= 25	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315	ATE [Oral] = 1.400 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1]

	Index: 603-009-00-3		STOT SE 3, H335 (Respiratory tract irritation)		
Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol	CAS : 25085-50-1	>= 10 - <= 25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycl	-	> 0 - <= 10	Asp. Tox. 1, H304	-	[1]
bornan-2-one	EC : 200-945-0 CAS : 76-22-2	> 0 - < 10	Flam. Sol. 2, H228 Skin Sens. 1, H317 STOT RE 1, H372 Aquatic Chronic 4, H413	-	[1]
bismuth tris(2-ethylhexanoate)	EC : 267-499-7 CAS : 67874-71-9	> 0 - <= 10	Eye Irrit. 2, H319	-	[1]
rosin	EC : 232-475-7 CAS : 8050-09-7 Index: 650-015-00-7	> 0 - <= 5	Met. Corr. 1, H290 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 100 M [Chronic] = 10	[1]
xylene	EC : 215-535-7 CAS : 1330-20-7 Index: 601-022-00-9	> 0 - <= 5	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 (Respiratory tract irritation) STOT RE 2, H373 (oral, inhalation) Asp. Tox. 1, H304	ATE [Dermal] = 1.100 mg/kg ATE [Inhalation (gases)] = 5.000 ppm	[1] [2]
turpentine, oil	EC : 232-350-7 CAS : 8006-64-2 Index: 650-002-00-6	> 0 - <= 5	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1.100 mg/kg ATE [Inhalation (vapours)] = 13,7 mg/l	[1]
zinc neodecanoate	EC : 248-370-4 CAS : 27253-29-8	> 0 - <= 3	Skin Corr. 1, H314 Eye Dam. 1, H318	-	[1]
4-methylpentan-2-one	EC : 203-550-1 CAS : 108-10-1 Index: 606-004-00-4	> 0 - < 0,3	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 (Narcotic effects)	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]

dodecane-1-thiol	EC : 203-984-1 CAS : 112-55-0	> 0 - <= 0,3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 (Respiratory tract irritation)	-	[1]
linalool	EC : 201-134-4 CAS : 78-70-6 Index: 603-235-00-2	> 0 - <= 0,3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
Fuels, diesel, No 2	EC : 270-676-1 CAS : 68476-34-6 Index: 649-227-00-2	> 0 - <= 0,3	Carc. 2, H351	-	[1]
dipentene	EC : 205-341-0 CAS : 138-86-3 Index: 601-029-00-7	> 0 - <= 0,3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
cineole	EC : 207-431-5 CAS : 470-82-6	> 0 - <= 0,3	Flam. Liq. 3, H226 Skin Sens. 1, H317	-	[1]
eugenol	EC : 202-589-1 CAS : 97-53-0	> 0 - <= 0,3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1, H317	ATE [Oral] = 1.930 mg/kg	[1]

See Section 16 for the full text of the H statements declared above.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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type
[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer

should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain, watering, redness

Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing

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

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides, phosphorus oxides, metal oxide/oxides Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides, phosphorus oxides, metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : 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.

Special protective equipment for fire-fighters : 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

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an

appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled 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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : 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. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E1	100 t	200 t

7.3 Specific end use(s)

Recommendations : Not available.
Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	**Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (2004-03-01). Absorbed through skin..** TWA 221 mg/m3 50 ppm STEL 442 mg/m3 100 ppm **EU OEL (2000-06-01). Absorbed through skin..** TWA 221 mg/m3 50 ppm STEL 442 mg/m3 100 ppm
4-methylpentan-2-one	**EU OEL (2000-06-01).** TWA 83 mg/m3 20 ppm STEL 208 mg/m3 50 ppm **Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (2004-03-01).** TWA 83 mg/m3 20 ppm STEL 208 mg/m3 50 ppm

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : 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.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
cyclohexanol	DNEL	Long term Dermal	1,43 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0,716 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0,716 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	40,3 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	10 mg/m³	General population	Systemic
bornan-2-one	DNEL	Long term Inhalation	4,3478 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	17,6316 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic
bismuth tris(2-ethylhexanoate)	DNEL	Long term Inhalation	0,21 mg/m³	General population	Systemic
	DNEL	Long term Oral	0,24 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0,85 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	0,48 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0,24 mg/kg bw/day	General population	Systemic
rosin	DNEL	Long term Oral	1,0655 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
	DNEL	Long term Dermal	2,131 mg/kg bw/day	Workers	Systemic
xylene	DNEL	Long term Oral	12,5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Short term Inhalation	260 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	260 mg/m³	General population	Local
	DNEL	Long term	221 mg/m³	Workers	Systemic

		Inhalation			
	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65,3 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	65,3 mg/m³	General population	Local
	DNEL	Long term Oral	12,5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Short term Inhalation	260 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	260 mg/m³	General population	Local
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65,3 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	65,3 mg/m³	General population	Local
turpentine, oil	DNEL	Short term Dermal	1,6 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	0,11 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	51,6 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	10,3 mg/m³	Workers	Local
	DNEL	Long term Inhalation	3,9 mg/m³	Workers	Local
	DNEL	Long term Dermal	3,17 mg/cm²	Workers	Local
	DNEL	Short term Oral	0,59 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0,12 mg/m³	General population	Systemic
	DNEL	Short term Dermal	9,51 mg/cm²	Workers	Local
	DNEL	Long term Inhalation	0,78 mg/m³	Workers	Systemic

	DNEL	Long term Dermal	1,17 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0,018 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0,417 mg/kg bw/day	General population	Systemic
zinc neodecanoate	DNEL	Long term Dermal	1,1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1,1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	25,93 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	25,93 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	7,67 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	7,67 mg/m³	General population	Systemic
	DNEL	Long term Dermal	2,21 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	2,21 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	2,21 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	2,21 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1,1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	25,93 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	7,67 mg/m³	General population	Systemic
	DNEL	Long term Dermal	2,21 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	2,21 mg/kg bw/day	General population	Systemic
4-methylpentan-2-one	DNEL	Long term Oral	4,2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	208 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	208 mg/m³	Workers	Local
	DNEL	Long term Inhalation	83 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	83 mg/m³	Workers	Local
	DNEL	Long term Inhalation	14,7 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	14,7 mg/m³	General population	Local
	DNEL	Long term Dermal	11,8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term	155,2 mg/m³	General	Systemic

		Inhalation		population	
	DNEL	Short term Inhalation	155,2 mg/m³	General population	Local
linalool	DNEL	Long term Dermal	3 mg/cm²	Workers	Local
Fuels, diesel, No 2	DNEL	Long term Dermal	1,25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	1,25 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	4288 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	2572,8 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	68,34 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	20,22 mg/m³	General population	Systemic
	DNEL	Long term Dermal	2,91 mg/kg bw/day	Workers	Systemic
cineole	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	600 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	7,05 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1,74 mg/m³	General population	Systemic
eugenol	DNEL	Long term Oral	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	21,2 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	5,22 mg/m³	General population	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to

remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : It is recommended to wear a hooded visor or protective visor combined with airtight goggles (ref. Standard EN 166).

Skin protection

Hand protection : Protect hands with category III work gloves (ref. Standard EN 374). For the final choice of the material of the work gloves it is necessary to consider: compatibility, degradation, breakage time and permeation. In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and method of use.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. In case of exceeding the threshold value (e.g. TLV-TWA) of the substance or of one or more of the substances present in the product, it is recommended to wear a mask with type AX filter whose limit of use will be defined by the manufacturer (ref. . standard EN 14387). If there are gases or vapors of a different nature and / or gases or vapors with particles (aerosols, fumes, mists, etc.), combined filters must be provided. The use of respiratory protection means is necessary in case the technical measures adopted are not sufficient to limit the exposure of the worker to the threshold values taken into consideration. The protection offered by the masks is however limited. In the event that the substance in question is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear an open-circuit compressed air breathing apparatus (ref. Standard EN 137) or a self-contained breathing apparatus. outdoor air (ref. EN 138 standard). For the correct choice of the respiratory protection device, refer to the EN 529 standard.

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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	liquid [liquid]
Color	:	Brown.
Odor	:	Aromatic.
Odor threshold	:	Not available.
Melting point/freezing point	:	< 10 °C (< 50 °F)
Initial boiling point and boiling range	:	> 100 °C (> 212 °F)
Flammability	:	Non-flammable.
Lower and upper explosion limit	:	**Lower:** 61 %(V) **Upper:** 67 %(V)
Flash point	:	64 °C (147 °F)

Auto-ignition temperature :

Ingredient name	Auto-ignition temperature
turpentine, oil	220 - 255 °C (428 - 491 °F)
linalool	235 °C (455 °F)
dipentene	236,67 °C (458,01 °F)
(R)-p-mentha-1,8-diene	237 °C (459 °F)
pin-2(3)-ene	255 °C (491 °F)
cyclohexanol	300 °C (572 °F) 285 °C (545 °F)
4-methylcyclohexanol, mixed isomers	295 °C (563 °F)
cineole	300 °C (572 °F)
propan-2-ol	398,89 °C (750,00 °F)
3-methoxybutyl acetate	410 °C (770 °F)
n-butyl acetate	415 °C (779 °F) (EU A.15)
xylene	432 °C (810 °F)
1-isopropyl-4-methylbenzene	435 °C (815 °F)
Aromatic hydrocarbons, C10	> 400 °C (> 752 °F)
ethanol	455 °C (851 °F) (DIN 51794)
bornan-2-one	466 °C (871 °F)

Decomposition temperature : Not available.

pH	:	Product is non-polar/aprotic.
Viscosity	:	**Dynamic :** Not available. **Kinematic :** 80 mm2/s @ 30 °C (86 °F)
Solubility in water	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable. The product is a mixture

Vapor pressure :

Ingredient name	Vapor pressure
ethanol	57,26 hPa (@ 19,6 °C) (67,3 °F)
propan-2-ol	44 hPa (@ 20 °C) (68 °F)
4-methylpentan-2-one	21 hPa (@ 20 °C) (68 °F)
n-butyl acetate	15 hPa (@ 20 °C) (68 °F) (DIN EN 13016-2)
xylene	8,93 hPa (@ 21 °C) (70 °F)
pin-2(3)-ene	8,51 hPa (@ 25 °C) (77 °F) (EU A.4) 6,9 hPa (@ 20 °C) (68 °F) (OECD 104)
(-)-pin-2(3)-ene	8,51 hPa (@ 25 °C) (77 °F) 6,9 hPa (@ 20 °C) (68 °F)
turpentine, oil	6,69 hPa (@ 25 °C) (77 °F) (EU A.4) 26 hPa (@ 25 °C) (77 °F) 5,19 hPa (@ 20 °C) (68 °F) (OECD 104)
pin-2(10)-ene	3,54 hPa (@ 25 °C) (77 °F) (EU A.4) 2,73 hPa (@ 20 °C) (68 °F) (OECD 104)
dodecane-1-thiol	3,3 hPa (@ 25 °C) (77 °F)
(R)-p-mentha-1,8-diene	2 hPa (@ 24,85 °C) (76,73 °F)
1-isopropyl-4-methylbenzene	2 hPa (@ 20 °C) (68 °F)
p-mentha-1,4(8)-diene	1,33 hPa (@ 25 °C) (77 °F) 1,01 hPa (@ 20 °C) (68 °F)
cyclohexanol	1,3 hPa (@ 20 °C) (68 °F) 1,33 hPa
cineole	1,22 hPa (@ 20 °C) (68 °F)
Aromatic hydrocarbons, C10	0,9 hPa (@ 20 °C) (68 °F)
bornan-2-one	0,87 hPa (@ 25 °C) (77 °F)
3-methoxybutyl acetate	5 hPa (@ 50 °C) (122 °F) (OECD 104) 0,34 hPa (@ 20 °C) (68 °F) (OECD 104) 0,58 hPa (@ 25 °C) (77 °F) (OECD 104)
linalool	0,27 hPa (@ 24,85 °C) (76,73 °F) (OECD 104)
1,3-diisopropylbenzene	0,0997 hPa (@ 20 °C) (68 °F)
eugenol	0,0399967 hPa (@ 25 °C) (77 °F)
p-menth-1-en-8-yl acetate	0,03515 hPa (@ 23 °C)

Relative density : 0,98

Density : 0,85 - 1,1 g/cm3
Vapor density : Not available.
Explosive properties : Not available.
Oxidizing properties : Not available.

Particle characteristics

Median particle size : Not applicable.

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 : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
cyclohexanol				
	LD50 Oral	Rat	1.400 mg/kg	-
rosin				
	LD50 Oral	Rat	7.600 mg/kg	-
xylene				
	LD50 Oral	Rat	4.300 mg/kg	-
	LC50 Inhalation Gas.	Rat	5.000 ppm	4 h
turpentine, oil				
	LD50 Oral	Rat	3.956 mg/kg	-
	LC50 Inhalation Vapor	Rat	19,9 mg/l	1 h

	LC50 Inhalation Vapor	Rat	13,7 mg/l	4 h
4-methylpentan-2-one				
	LD50 Oral	Rat	2.080 mg/kg	-
linalool				
	LD50 Oral	Rat	2.790 mg/kg	-
	LD50 Dermal	Rabbit	5.610 mg/kg	-
	LD50 Dermal	Rat	5.610 mg/kg	-
dipentene				
	LD50 Oral	Rat	5.300 mg/kg	-
cineole				
	LD50 Oral	Rat	2.480 mg/kg	-
eugenol				
	LD50 Oral	Rat	1.930 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral	Dermal	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and mists)
HTL--000139-H009	4602,8 mg/kg	16538,1 mg/kg	137931 ppm	45,1 mg/l	N/A
cyclohexanol	1400 mg/kg	N/A	N/A	11 mg/l	N/A
rosin	7600 mg/kg	N/A	N/A	N/A	N/A
xylene	4300 mg/kg	1100 mg/kg	5000 ppm	N/A	N/A
turpentine, oil	500 mg/kg	1100 mg/kg	N/A	13,7 mg/l	N/A
4-methylpentan-2-one	500 mg/kg	N/A	N/A	11 mg/l	N/A
linalool	2790 mg/kg	5610 mg/kg	N/A	N/A	N/A
dipentene	5300 mg/kg	N/A	N/A	N/A	N/A
cineole	2480 mg/kg	N/A	N/A	N/A	N/A
eugenol	1930 mg/kg	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
cyclohexanol	Skin - Moderate irritant	Rabbit	-	24 hrs	-
	Skin - Mild irritant	Rabbit	-	24 hrs	-
	Eyes - Moderate irritant	Rabbit	-	24 hrs	-
	Eyes - Mild irritant	Rabbit	-	24 hrs	-
	Eyes -	Rabbit	-		-

	Moderate irritant				
xylene	Skin - Mild irritant	Rat	-	8 hrs	-
	Skin - Moderate irritant	Rabbit	-		-
	Skin - Moderate irritant	Rabbit	-	24 hrs	-
	Eyes - Mild irritant	Rabbit	-		-
	Eyes - Severe irritant	Rabbit	-	24 hrs	-
turpentine, oil	Skin - Severe irritant	Rabbit	-		-
	Skin - Severe irritant	Human	-		-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hrs	-
	Skin - Mild irritant	Rabbit	-	24 hrs	-
	Eyes - Severe irritant	Rabbit	-		-
linalool	Eyes - Moderate irritant	Rabbit	-	1 hrs	-
	Skin - Mild irritant	Man	-	48 hrs	-
	Skin - Mild irritant	Rabbit	-	24 hrs	-
	Skin - Severe irritant	Rabbit	-	24 hrs	-
	Eyes - Moderate irritant	Rabbit	-		-
	Skin - Moderate irritant	Guinea pig	-	24 hrs	-
	Skin - Mild irritant	Human	-	72 hrs	-
dipentene	Skin - Moderate irritant	Rabbit	-	24 hrs	-
eugenol	Skin - Moderate irritant	Man	-	48 hrs	-
	Skin - Severe irritant	Rabbit	-	24 hrs	-
	Skin - Mild	Pig	-	48 hrs	-

	irritant				
	Skin - Moderate irritant	Guinea pig	-	24 hrs	-
	Skin - Mild irritant	Human	-	48 hrs	-

Conclusion/Summary

Skin : Not available.
Eyes : Not available.
Respiratory : Not available.

Sensitization

Conclusion/Summary

Skin : Not available.
Respiratory : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
cyclohexanol	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
dodecane-1-thiol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
bornan-2-one	Category 1	-	-
xylene	Category 2	oral inhalation	-

Aspiration hazard

Product/ingredient name	Result
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycl	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1
turpentine, oil	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : May cause respiratory irritation.
Skin contact : Causes skin irritation. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain, watering, redness
Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing
Skin contact : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
Ingestion : Adverse symptoms may include the following: stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

11.2. Information on other hazards

11.2.1 Endocrine disrupting properties : Not available.
11.2.2 Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
cyclohexanol			

	Acute LC50 704 mg/l Fresh water	Fish - Pimephales promelas	96 h
xylene			
	Acute LC50 13,4 mg/l Fresh water	Fish - Pimephales promelas	96 h
	Acute LC50 8,5 mg/l Marine water	Crustaceans - Palaemonetes pugio	48 h
4-methylpentan-2-one			
	Acute LC50 505 mg/l Fresh water	Fish - Pimephales promelas	96 h
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas	33 d
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 d
linalool			
	Acute LC50 28,8 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 h
	Acute EC50 36,7 mg/l Fresh water	Daphnia - Daphnia magna	48 h
dipentene			
	Acute EC50 20,2 mg/l Fresh water	Fish - Pimephales promelas	96 h
	Acute EC50 28,2 mg/l Fresh water	Daphnia - Daphnia magna	48 h
	Acute IC50 13,798 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 h
cineole			
	Acute LC50 102 mg/l Fresh water	Fish - Pimephales promelas	96 h
eugenol			
	Acute LC50 24 mg/l Fresh water	Fish - Pimephales promelas	96 h

Conclusion/Summary **:** Not available.

12.2 Persistence and degradability

Conclusion/Summary **:** Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
cyclohexanol	1,21,25	-	low
bornan-2-one	2,38	-	low
rosin	1,9 - 7,7	-	high
xylene	3,15	8,10 - 25,90	low
zinc neodecanoate	-	60.960,00 60.960,00	high
4-methylpentan-2-one	1,9	-	low
dodecane-1-thiol	6,5	-	high
linalool	2,84	-	low
Fuels, diesel, No 2	3,3	-	low

dipentene	4,57	-	high
cineole	2,74	-	low
eugenol	2,27	-	low

12.4 Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties : Not available.

12.7 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

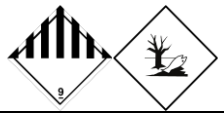
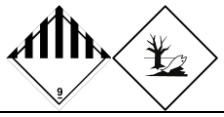
Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)	
	15 01 10*	packaging containing residues of or contaminated by hazardous substances

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, rosin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, rosin)	Environmentally hazardous substance, liquid, n.o.s.ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Formaldehyde, polymer with 4-(1,1-dimethylethyl)phenol, rosin)
14.3 Transport hazard class(es)	9 	9 	9 
14.4 Packing group	III	III	III
14.5. Environmental hazards	Yes.	Yes.	Yes.

Additional information

ADR/RID : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Tunnel code (-)

ADN : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IATA : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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 : Not available.

to IMO instruments

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 authorization

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

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (1005/2009/EU)

None of the components are listed.

Prior Informed Consent (PIC) (649/2012/EU)

None of the components are listed.

Persistent Organic Pollutants

None of the components are listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
E1

National regulations

D.Lgs. 152/06 : Not determined.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Chemical Weapons Convention List Schedule I Chemicals

None of the components are listed.

Chemical Weapons Convention List Schedule II Chemicals
None of the components are listed.

Chemical Weapons Convention List Schedule III Chemicals
None of the components are listed.

Montreal Protocol
None of the components are listed.

Stockholm Convention on Persistent Organic Pollutants

Annex A - Elimination - Production
None of the components are listed.

Annex A - Elimination - Use
None of the components are listed.

Annex B - Restriction - Production
None of the components are listed.

Annex B - Restriction - Use
None of the components are listed.

Annex C - Unintentional - Production
None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Rotterdam Convention on Prior Informed Consent (PIC) - Industrial
None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC) - Pesticide
None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC) -Severely hazardous pesticide
None of the components are listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Heavy metals - Annex 1
None of the components are listed.

POPs - Annex 1 - Production
None of the components are listed.

POPs - Annex 1 - Use
None of the components are listed.

POPs - Annex 2
None of the components are listed.

POPs - Annex 3

None of the components are listed.

Inventory list

Australia	:	Not determined.
Canada	:	Not determined.
China	:	Not determined.
Eurasian Economic Union	:	**Russian Federation inventory:** Not determined.
Japan	:	**Japan inventory (CSCL)**: Not determined. **Japan inventory (ISHL)**: Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States	:	At least one component is inactive.
Viet Nam	:	Not determined.

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

SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335 (Respiratory tract irritation)	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.

H226	Flammable liquid and vapor.
H228	Flammable solid.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 4	AQUATIC HAZARD (LONG-TERM) - Category 4
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Flam. Sol. 2	FLAMMABLE SOLIDS - Category 2
Met. Corr. 1	CORROSIVE TO METALS - Category 1
Muta. 2	GERM CELL MUTAGENICITY - Category 2
Repr. 1B	TOXIC TO REPRODUCTION - Category 1B
Resp. Sens. 1	RESPIRATORY SENSITIZATION - Category 1
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

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Notice to reader

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