

SAFETY DATA SHEET

CASYblue



1. Product and company identification

Product name : CASYblue

Product code : 5651760

Supplier's details : OMNI Life Science GmbH & Co. KG
Karl-Ferdinand-Braun-Strasse 2
28359 Bremen
Germany
Tel.: +49 421-276 169 0 (Monday to Thursday 08:00 - 17:00 h, Friday 08:00 - 16:00)

e-mail address of person responsible for this SDS : info@ols-bio.de

Emergency telephone number (with hours of operation) : +81 - 29 - 852 - 9999 (JPIC, 9 a.m. - 9 p.m.)
+81 - 345209637 CCN823152

Product use : Special reagent for CASY® cell counters for differentiation of live and dead cells.
Restrictions on use: For professional use only.

2. Hazards identification

GHS Classification : FLAMMABLE LIQUIDS - Category 2
EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

GHS label elements

Hazard pictograms :



Signal word :

Danger

Hazard statements :

Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
Causes damage to organs. (central nervous system (CNS), systemic toxicity)
Causes damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), liver, respiratory system, spleen)

Precautionary statements

Prevention :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 - Use explosion-proof electrical, ventilating or lighting equipment.
P243 - Take action to prevent static discharges.
P240 - Ground and bond container and receiving equipment.

2. Hazards identification

P271 - Use only outdoors or in a well-ventilated area.

P260 - Do not breathe dust or mist.

P270 - Do not eat, drink or smoke when using this product.

P264 - Wash hands thoroughly after handling.

Response

- : P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
- P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage

- : P405 - Store locked up.
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235 - Keep cool.

Disposal

- : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

- : None known.

Other hazards which do not result in classification : Vapors may form explosive mixtures with air.

3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	Identifiers	Official Gazette notice reference number	
			CSCL	ISHL
Ethanol	70	CAS: 64-17-5	2-202	2-202
Isopropyl alcohol	15	CAS: 67-63-0	2-207	2-(8)-319

4. First aid measures

Inhalation

- : 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. Get medical attention. If necessary, call a poison center or physician. 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

- : Flush contaminated skin with plenty of 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. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact

- : 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. Get medical attention. If necessary, call a poison center or physician.

4. First aid measures

Ingestion : 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. Get medical attention. If necessary, call a poison center or 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation : Causes damage to organs following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Causes damage to organs following a single exposure in contact with skin.

Eye contact : Causes serious eye irritation.

Ingestion : Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

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.

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures



- Suitable extinguishing media** : Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog). Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- 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.

6. Accidental release measures

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing 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".
- 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).

Methods and materials for containment and cleaning up

- Small spill** :  Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert 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. Use spark-proof tools and explosion-proof equipment. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

7. Handling and storage

Precautions for safe handling

7. Handling and storage

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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.

Storage

- Conditions for safe storage** : Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

8. Exposure controls/personal protection

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Occupational exposure limits

Ingredient name	Exposure limits
Isopropyl alcohol	Japan Society for Occupational Health (Japan, 5/2024) OEL-C: 400 ppm. OEL-C: 980 mg/m ³ . Industrial Safety and Health Act (Japan, 6/2025) TWA 8 hours: 200 ppm.

Biological exposure indices

None known.

Individual protection measures



- 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.

8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. 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.

9. Physical and chemical properties

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

- Physical state** : Liquid.
- Color** : Blue.
- Odor** : Alcohol-like.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Softening point** : Not available.
- Boiling point or initial boiling point and boiling range** : 78°C (172.4°F)
- Flash point** : 13°C (55.4°F)
- Flammability** :  Highly flammable liquid and vapor.
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapor pressure** : Not available.
- Relative vapor density** : Not available.
- Relative density** : Not available.
- Density** : 0.9 g/cm³ [20°C (68°F)]
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** :  Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.
- Explosive properties** : Vapors may form explosive mixtures with air.
- Oxidizing properties** : No oxidizing ingredients present.
- Particle characteristics**
- Median particle size** : Not applicable.

10. Stability and reactivity

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

Chemical stability : The product is stable.

Possibility of hazardous reactions : May form explosive mixtures with air. Under normal conditions of storage and use, hazardous reactions will not occur.

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

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced. In a fire, decomposition may produce toxic gases/fumes.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result and Species	Dose [Exposure]	Remarks
ethanol	Oral - Rat - LD50	7000 mg/kg	-
	Oral - Mouse - LD50	3450 mg/kg	-
	Inhalation - Rat - LC50 Vapor	20000 ppm [10 hours]	-
	Inhalation - Mouse - LC50 Vapor	39 g/m ³ [4 hours]	-
	Oral - Rat - LD50	4570 mg/kg	-
	Oral - Mouse - LD50	3600 mg/kg	-
	Oral - Rabbit - LD50	6410 mg/kg	-
	Dermal - Rabbit - LD50	13400 mg/kg	-
	Inhalation - Rat - LC50 Vapor	16000 ppm [4 hours]	-
	Inhalation - Mouse - LC50 Vapor	53 mg/l [4 hours]	-
Isopropyl alcohol			

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
CASYblue	30487.0	N/A	N/A	N/A	N/A
ethanol	7000	N/A	N/A	N/A	N/A
Isopropyl alcohol	4570	13400	N/A	N/A	N/A

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Conclusion/Summary

Skin : Not available.

Eyes : Causes serious eye irritation.

Respiratory : Not available.

11. Toxicological information

Respiratory sensitization/Skin sensitization

Conclusion/Summary

Skin : Not available.

Respiratory : Not available.

Germ Cell Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : May damage fertility or the unborn child.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
ethanol	Category 3	-	Respiratory tract irritation
	Category 3	-	Narcotic effects
Isopropyl alcohol	Category 1	-	central nervous system (CNS), systemic toxicity
	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethanol	Category 1	-	liver
	Category 2	-	central nervous system (CNS)
Isopropyl alcohol	Category 1	-	blood system
	Category 2	-	liver, respiratory system, spleen

Aspiration hazard

Not available.

12. Ecological information

Ecotoxicity

Product/ingredient name	Result [Exposure]	Species	Remarks
ethanol	Acute - LC50 8000 mg/l [48 hours]	Fish - <i>Leuciscus idus</i>	-
	Acute - LC50 7100 mg/l [48 hours] [OECD 203]	Fish - <i>Oncorhynchus mykiss</i>	-
	Acute - EC50 5400 mg/l [48 hours]	Daphnia - <i>Daphnia magna</i>	-
	Chronic - EC10	Algae - <i>Scenedesmus</i>	-

12. Ecological information

Isopropyl alcohol	5000 mg/l [7 days]	<i>quadricauda</i>	
	Acute - EC0 6500 mg/l [16 hours]	Micro-organism - <i>Pseudomonas putida</i>	-
	Acute - LC0 10000 mg/l [48 hours] [OECD 203]	Fish - <i>Oncorhynchus mykiss</i>	-
	Acute - LC50 12250 mg/l [48 hours] [OECD 203]	Fish - <i>Oncorhynchus mykiss</i>	-
	Acute - LC100 15000 mg/l [48 hours] [OECD 203]	Fish - <i>Oncorhynchus mykiss</i>	-
	Acute - EC50 9500 mg/l [24 hours]	Daphnia - <i>Daphnia magna</i>	-
	Acute - EC50 1800 mg/l [168 hours] [OECD 201]	Algae - <i>Scenedesmus quadricauda</i>	-
	Acute - EC0 1050 mg/l [16 hours]	Micro-organism - <i>Pseudomonas putida</i>	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Persistence/degradability

Product/ingredient name	Test	Result	Remarks
Isopropyl alcohol	OECD 302	99% [11 days] - Readily	-
	OECD 302	57% [5 days]	-

Conclusion/Summary : There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Ethanol	-	-	Readily
Isopropyl alcohol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Isopropyl alcohol	0.05	-	Low

Mobility in soil : Not available.

Soil/Water partition coefficient : Not available.




Hazardous to the ozone layer : Not applicable.

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

13. Disposal considerations

Disposal methods : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	UN	IMDG	IATA
UN number	UN1987	UN1987	UN1987
UN proper shipping name	ALCOHOLS, N.O.S. (ethanol, Isopropyl alcohol)	ALCOHOLS, N.O.S. (ethanol, Isopropyl alcohol)	Alcohols, n.o.s. (ethanol, Isopropyl alcohol)
Transport hazard class(es)	3	3	3
Label			
Packing group	II	II	II
Environmental hazards	No.	Marine Pollutant: No	No.

Additional information

UN : **Special provisions** 274

IMDG : **Emergency schedules** F-E, S-D
Special provisions 274

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.
Special provisions A3, A180

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.

Transport in bulk according to IMO instruments : Not applicable.

15. Regulatory information

Fire Service Law

Category	Substance name/Type	Danger category	Signal word	Designated quantity
Category IV	Class I petroleums	II	Flammable - Keep Fire Away	200 L

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

Organic solvents : Class 2
poisoning prevention

Ingredient name	%	Status
Isopropyl alcohol	15	Class 2

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number	
ethanol	≥60 - ≤70	Listed	2-205	*
Isopropyl alcohol	14.99	Listed	2-1780	

*Any concentration shown as a range is to protect confidentiality.

Chemicals requiring notification

Ingredient name	%	Status	Reference number	
ethanol	≥60 - ≤70	Listed	2-205	*
Isopropyl alcohol	14.99	Listed	2-1780	

*Any concentration shown as a range is to protect confidentiality.

Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations. (Article 594-2 Paragraph 1 of Ordinance on ISH)

None of the components are listed.

Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

Carcinogens based on Paragraph 3, Article 28 of the Law

None of the components are listed.

Mutagen

None of the components are listed.

ISHL Enforcement Order : Inflammable

Appendix 1 - Dangerous Substances

Organic solvents : Class 2
poisoning prevention

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	Reference number
Isopropyl alcohol	≥10 - ≤20	Priority assessment	102

Poisonous and Deleterious Substances

None of the components are listed.

15. Regulatory information

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

High Pressure Gas Control : Not available.

Law

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

OECD Comprehensive Global PFAS Database

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory : All components are listed or exempted.
Japan	: Japan inventory (CSCL) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: All components are listed or exempted.
Turkey	: All components are listed or exempted.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.

16. Other information

History

Date of printing : 18/12/2025

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Date of previous issue : 02/06/2022

Version : 4

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION - Category 1A	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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