

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Trade name: **Anti-corrosion preparation IKOROL, liquid**
 (contain: isopropanol,; Benzaldehyde, 2-hydroxy-5-nonyl-, oxime;
 Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; Hydrocarbons, C6,
 isoalkanes, <5% n-hexane)

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Preparation of steel surfaces, galvanized steel, heavily corroded, hard-rusting steels, as well as surfaces with old, well-adherent paint coatings before applying anti-corrosion coating systems.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

75 Koszykowa St.
 PL-00-662 WARSAW
 Phone: +48 609 662 636
 e-mail for a competent person responsible for the safety data sheet:
 wiswa@pw.edu.pl

1.4. EMERGENCY TELEPHONE NUMBER

Emergency telephone number across the European Union: SOS 112

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification of product

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

The product is classified as hazardous:

physical	Flam. Liq. 2, H225	Highly flammable liquid and vapour.
for health	Skin Irrit. 2, H315	Causes skin irritation.
	Skin Sens. 1, H317	May cause an allergic skin reaction.
	Eye Dam. 1, H318	Causes serious eye damage.
	Repr. 1B, H360fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
	STOT SE 3, H336	May cause drowsiness or dizziness.
for environment	Aquatic Chronic 2, H411	Toxic to aquatic life with long lasting effects.

2.2. LABEL ELEMENTS

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

Product identifier:

Anti-corrosion preparation IKOROL, liquid
 (contain: isopropanol,; Benzaldehyde, 2-hydroxy-5-nonyl-, oxime; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; Hydrocarbons, C6, isoalkanes, <5% n-hexane)

Hazard pictogram(s)



(GHS02)



(GHS05)



(GHS08)



(GHS07)



(GHS09)

Signal word(s) **Danger**

Hazard statement(s)

[H225]	Highly flammable liquid and vapour.
[H315]	Causes skin irritation.
[H317]	May cause an allergic skin reaction.
[H318]	Causes serious eye damage.
[H360fd]	Suspected of damaging fertility. Suspected of damaging the unborn child.

- [H336] May cause drowsiness or dizziness.
 [H411] Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

General ---

- Prevention [P210] Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
 [P261] Avoid breathing mist/vapours.
 [P273] Avoid release to the environment.
 [P280] Wear protective gloves/protective clothing/eye protection/face protection.

- Response [P305+P351+P338] IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 [P302+P352] IF ON SKIN: Wash with plenty of soap and water.
 [P333+P313] If skin irritation or rash occurs: Get medical advice/attention.
 [P304+P340] IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage [P403+P233] Store in a well-ventilated place. Keep container tightly closed.

Disposal ---

Additional labeling requirements (for packaging provided to the general public)

Packaging must bear a tactile warning of danger.

2.3. OTHER HAZARDS

Vapors form explosive mixtures with air.

Closed containers exposed to fire or high temperature may explode as a result of pressure build-up inside them.

The product does not contain constituents that meet the PBT or vPvB criteria according to Annex XIII of the REACH regulation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. SUBSTANCES

Not applicable

3.2. MIXTURES
PRODUCT CHARACTERISTICS

A mixture of benzaldehyde, 2-hydroxy-5-nonyl-, oxime and other organic compounds in organic solvents.

Identification of hazardous constituent

Substance identifier	% (m/m)	Classification ^{1/} according to (EC) No 1272/2008
Isopropanol EC: 200-661-7 CAS: 67-63-0 Index No: 603-117-00-02/ Registration No: 01-2119457558-25-xxxx	80 - 90	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Benzaldehyde, 2-hydroxy-5-nonyl-, oxime EC: 605-717-8 CAS: 174333-80-3 Index No: --- Registration No: 01-2119486798-12-0001	5 - 10	Repr. 1B, H360fd Eye Dam. 1, H318 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics ^{3/} EC: 927-510-4 CAS: 64742-49-0 Index No: --- Registration No: 01-2119475515-33-XXXX	3 - 6	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411
Hydrocarbons, C6, isoalkanes, <5% n-hexane ^{3/} EC: 931-254-9 CAS: 64742-49-0 Index No: --- Registration No: 01-2119484651-34-XXXX	2 - 4	

^{1/} The meaning of symbols, abbreviations and H phrases - see section 16.

^{2/} The Index No is assigned to substances included in Annex VI to Regulation 1272/2008 (CLP) - harmonized classification.

^{3/} Gasoline extraction, light gasoline treated with hydrogen

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

General advices

Provide medical attention in the event of severe symptoms or symptoms that persist after providing help, as described below.

Never give anything by mouth to an unconscious person. Do not leave the injured person unattended.

Show the MSDS or the label / packaging to the attending physician.

In case of inhalation

Remove victim from the contaminated area to fresh air immediately. Keep at rest, place in the recovery position.

CAUTION: For your own safety, avoid the mouth-to-mouth respiration if injured person is out of breath. In the case of strong or persistent symptoms, obtain medical assistance.

In case of eye contact

Immediately rinse contaminated eyes with plenty of water for several minutes, remove contact lenses, if present, and continue rinsing for at least 20 minutes. Move eyeball and keep eyelids wide open and apart whilst irrigating. Get medical attention immediately, preferably from an ophthalmologist.

CAUTION: Do not use too strong water stream - can damage cornea.

In case of contact with skin

Immediately remove contaminated/soaked clothing and shoes. Immediately flush the contaminated skin with plenty of running water. Get medical attention if irritation develops and persists.

CAUTION: Remove contaminated clothing to a safe place, away from heat and ignition sources. Wash before reuse.

In case of ingestion

If victim is conscious rinse mouth thoroughly with water without swallowing. Give to drink water.

Do NOT induce vomiting. Provide fresh air and conditions to rest in a position comfortable for breathing.

Control and maintain airway patency. If dyspnoea occurs, obtain medical attention immediately.

In the event of unconsciousness, place the unconscious person in the recovery position and call for medical assistance immediately.

Personal protection for first-aiders:

Persons giving aid should be equipped with appropriate personal protective equipment.

Before commencing assistance, make sure that all sources of ignition, including the connected power supply, have been eliminated from the assisted area.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation Exposure to vapors / mists causes irritation of the mucous membranes of the upper respiratory tract, cough, headache, nausea, vomiting, dyspnea, disturbance of breath;

	prolonged exposure or high concentrations causes disorders of the central nervous system, drowsiness, breathing disorders.
Eye contact	Causes severe irritation. Exposure to high concentrations of vapors causes irritation of the mucous membranes of the eyes; splashing the liquid into the eye causes burning, redness and tearing. May damage eyes.
Skin contact	Causes irritation. It causes cracking and peeling of the skin as a result of its drying and degreasing; causes skin irritation on prolonged or frequent contact. May cause an allergic skin reaction.
Ingestion	In oral poisoning, gastric disorders (nausea, vomiting, abdominal pain) and disorders of the central nervous system and respiratory disorders analogous to inhalation exposure (headache and dizziness, psychomotor disorders, convulsions, loss of consciousness) may occur.

See also section 11.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Notes to physician	Symptomatic treatment.
Increasing medical conditions	No data.

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media: powders, foams resistant to alcohol, carbon dioxide, water spray (fog).

Unsuitable extinguishing media: continuous stream of water.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Highly flammable liquid. Vapors are heavier than air and may accumulate in the lower parts of rooms or confined spaces or spread long distances to sources of ignition and pose a risk from flashback, causing fire or explosion.

Closed containers exposed to fire or high temperature may explode as a result of pressure build-up inside them. In the fire environment, irritating / harmful carbon oxides and other unidentified organic destructs are generated.

Product is hazardous to the environment

5.3. ADVICE FOR FIREFIGHTERS

Immediately remove all bystanders from the endangered area, if necessary isolate the area.

Avoid inhalation of combustion products - they may be hazardous to health.

Follow the procedures applicable to chemical fires.

Fight fire from safe, maximum distance or use unmanned hose holders or monitor nozzles.

Containers exposed to fire or high temperature should be cooled with dispersed water from a safe distance (risk of explosion); if possible and safe, remove from the hazard area and continue spraying until they are completely cooled.

Prevent the fire fighting sewage release to drains and waters. Collect and dispose of the resulting sewage and fire residues in accordance with applicable regulations.

People involved in extinguishing the fire should be trained and equipped with respiratory isolating apparatus and full protective clothing.

Protective clothing intended for rescue and firefighting operations should meet the functional requirements of the relevant regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

CAUTION: Prevent the accumulation of vapors in low or confined spaces in order to avoid their flammable / explosive concentrations. Vapors / mist can moved along the floor / ground to distant sources of ignition and pose a risk from flashback.

Inform environment about an accidental release. Remove or evacuate all unprotected or unauthorized people from dangerous area. Isolate area, if need. Call fire and emergency services. Always stay upwind.

Eliminate all sources of ignition - extinguish open fire, do not smoke, do not use sparking tools or devices. Switch off electrical appliances. Take precautionary measures against static discharges. Avoid formation of flammable / explosive concentrations of vapors / mist in the air.

Avoid contamination of eyes, skin and clothes. Do not inhale vapors / mist. Avoid creating harmful concentrations of vapors in the air. If released in a closed room or in a confined space, ensure effective ventilation.

Follow the recommended safety precautions, use appropriate personal protective equipment.

6.2. ENVIRONMENTAL PRECAUTIONS

Product is harmful to the environment.

Stop or reduce leaks if it is possible and safe.

In case of large spillages reduce spreading by making embankments.

Dilute vapors with water spray.

Inform responsible authorities after accidental release of larger quantities.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Contain and collect spillage with non-combustible, absorbent material e.g. dry sand, dry earth, vermiculite and place into appropriate closed and labelled chemical waste container for later disposal. Rinse the residue and contaminated surface thoroughly with water. Dispose of in accordance with applicable regulations.

CAUTION: contaminated absorbent material may pose the same hazards as the released product.

Duże ilości cieczy zebranej w obwałowaniu odpompować przy użyciu specjalistycznego sprzętu.

If necessary, in order to remove the product or absorbent material contaminated with the product, use the help of specialized companies dealing with waste transport and disposal.

6.4. REFERENCE TO OTHER SECTIONS

Information on: emergency contact - see section 1; appropriate personal protective equipment - see section 8; waste disposal - see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Advices for safe handling

Read the labeling information before use. Use in accordance with the intended use and manufacturer's recommendations.

Prevent the formation of vapor concentrations exceeding the established occupational exposure limit values.

Use only with adequate ventilation. Keep unused containers tightly closed.

Avoid contamination of eyes, skin and clothes. Avoid breathing vapors / mist.

Follow basic rules of personal hygiene, use appropriate personal protective equipment (see section 8).

Advice on protection against fire and explosion

Comply with the applicable fire protection regulations.

Prevent vapors accumulation and formation of flammable / explosive vapor-air mixtures.

Eliminate all ignition sources (e.g. sparks, open flames, hot surfaces). Do not smoke. Do not use sparking equipment. Take precautionary measures against static discharges. Protect containers from heating.

Prevent the build-up of electrostatic charges.

Advice for general work hygiene

Proceed according to good industrial or laboratory hygienic practices.

Do not eat or drink while working. Do not smoke. Do not breathe vapours/mist. Avoid contact with eyes and skin.

Wash hands with plenty of water after work and before eating and smoking.

Wash hands to prevent possible eye irritation from accidental contact with any residues of substance on the hands.

Do not wear contaminated clothing. Take off contaminated clothing immediately and wash before re-use.

Keep contaminated/soaked clothing away from sources of heat and ignition.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Requirements for storage rooms and containers

Keep in a warehouse of flammable liquids.

Store in original, tightly closed, properly labeled, product-resistant containers in a cool, well-ventilated place.

Advice for combined storage

Store away from strong oxidants.

See also section 10.

Additional recommendations on storage conditions

Comply with applicable rules and regulations concerning the storage of flammable liquids.

Store away from heat sources, protect from direct sunlight.

Do not smoke, use open fire and sparking tools.

7.3. SPECIFIC END USE(S)

The product is used for the impregnation of corroded steel surfaces as a primer for top coats.

Please contact your supplier for more information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

This product does not contain substances for which indicative occupational exposure limit values were determined (Commission Directive 2000/39/EC, Commission Directive 2006/15/EC, Commission Directive 2009/161/EU).

Derived no effect level (DNEL)

Substance / Exposure	Route of exposure	DNEL	
		workers	consumers
Isopropanol			
Long-term	Skin	888 mg/kg/day	319 mg/kg/day
	Inhalation	500 mg/m ³	89 mg/m ³
	Ingestion	--	26 mg/kg/day
Hydrocarbons, C6, isoalkanes, <5% n-hexane			
Long-term	Skin	13964 mg/kg/day	1377 mg/kg/day
	Inhalation	5306 mg/m ³	1137 mg/m ³
	Ingestion	--	1301 mg/kg/day
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			
Long-term	Skin	300 mg/kg/day	149 mg/kg/day
	Inhalation	2085 mg/m ³	477 mg/m ³
Ingestion	--	149 mg/kg/day	

Predicted No Effect Concentration (PNEC) in environment

Substance	Ecosystem	PNEC
Isopropanol	Fresh water	140,9 mg/l
	Sea water	140,9 mg/l
	Freshwater sediments	552 mg/kg
	Sea water sediments	552 mg/kg
	Soil	28 mg/kg

8.2. EXPOSURE CONTROLS

8.2.1 Appropriate engineering controls

Use adequate general ventilation and/or appropriate local exhaust ventilation to keep airborne concentrations below dangerous limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing its dispersion into the general work area.

In places where large amounts of the product are used or stored, it is advisable to equip with explosion-proof devices and equipment.

Engineering controls are also necessary to monitor the concentration of vapors or mist due to the explosion hazard.

If the applied technical means of protection and the implemented work procedures are not sufficient to protect the employee against exposure to the product, use personal protective equipment

8.2.2. Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk posed by the product, the conditions at the workplace and the way of handling the product, as well as the potentially anticipated level of exposure.

Safety showers and emergency eye wash fountains should be available at or near the workplace.

Eye/face protection



In the case of activities posing a risk of eye contamination (liquid splashes, exposure to vapors / mists) wear protective glasses with a tight casing (goggles), unless the risk assessment indicates a higher level of protection.

Body protection



Hand protection

Wear impermeable protective gloves, resistant to organic solvents. (e.g. nitrile, polychloroprene).

The selected protective gloves must meet the requirements of the relevant standards.

The choice of glove material should be made taking into account the breakthrough time, rate of diffusion and degradation. The exact breakthrough time has to be obtained from the glove manufacturer. Taking into account the parameters specified by the manufacturer of the gloves, it is necessary to check whether the gloves maintain their protective properties during use. It is recommended to regularly check the condition of the gloves and replace them if there are any signs of wear, damage (tears, holes) or changes in appearance (color, flexibility, shape).



Skin protection

Wear protective clothing made of coated materials, resistant to the product; safety shoes.

Individual body protection measures should be selected according to the activities performed and the associated risks, and should be approved by a competent person before starting work with this product.

Respiratory protection



The selection of the appropriate respiratory protection should be based on the known or anticipated level of exposure, the hazard of the product or product ingredients, and the safe operating limits of the selected respirator.

Under normal conditions of use, they are not required.

In the event of short-term exceeding of the permissible occupational exposure levels or insufficient ventilation, use an approved respirator with an organic vapor absorber.

In case of working in confined spaces, insufficient oxygen content in the air, a large uncontrolled emissions or other circumstances, when the mask with the filter does not provide sufficient protection Use a respirator with independent air supply.

Environmental exposure controls

Product is harmful for the environment! Prevent leakage and release of the product into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance / physical state	: Liquid
Colour	: Light brown
Odour	: Characteristic, pungent
Odour threshold	: 100-500 mg/m ³ (isopropanol)
pH	: No data available

Melting point/freezing point	: No data available
Initial boiling point and boiling range	: c.a. 80 °C
Flash point	: 12 °C – closed cup (isopropanol)
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper/lower flammability or explosive limits:	2 - 12,7 % (v/v) (isopropanol)
Vapour pressure 20 °C	: 43,2 hPa (isopropanol)
Vapour density	: > 1
Relative density	: No data available
Solubility in water	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 400 °C
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. OTHER INFORMATION : None
SECTION 10: STABILITY AND REACTIVITY
10.1. REACTIVITY

Product reactivity data are not available.

10.2. CHEMICAL STABILITY

The product is stable under normal conditions of use and storage (see section 7).

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

Data are not available.

10.4. CONDITIONS TO AVOID

Avoid formation of flammable / explosive vapor-air mixtures.

Avoid heat, direct sunlight, open flames, electrostatic discharge, sparks, hot surfaces and any other ignition source.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizers. Halogen derivatives. Acids.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

They are not known. Combustion products - see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. INFORMATION ON TOXICOLOGICAL EFFECTS
Acute toxicity

Based on the data available for the ingredients, the product does not meet the classification criteria for this hazard class.

Product / Ingredient	Route of exposure - Dose / Concentration		Species
Product	No data		--
Isopropanol	LD ₅₀ oral	5045 mg/kg	rat
	LD ₅₀ dermal	12800 mg/kg	rabbit
CAS: 67-63-0	LC ₅₀ inhalation	> 5 mg/dm ³	---
Benzaldehyde, 2-hydroxy-5-nonyl-, oxime	LD ₅₀ oral	2 000 mg/kg	---
	LD ₅₀ dermal	2 000 mg/kg	---
CAS: 174333-80-3	LC ₅₀ inhalation	No data	---

$$ATE_{mix} = \frac{100}{\sum_n \frac{C_i}{ATE_i}}$$

where: C_i = concentration of ingredient i (% w/w or %v/v)

i = single ingredient from 1 to n

n = number of ingredients

ATE_i = the estimated acute toxicity of the ingredient i

ATE_{mix} = 4274 (oral)

ATE_{mix} = 8559 (dermal)

ATE_{mix} = 5,6 (inhalation)

Skin corrosion/irritation

No data is available for the product.

Base on the data for the ingredients, the product meets the classification criteria for this hazard class - skin irritation.

Serious eye damage/irritation

No data is available for the product.

Base on the data for the ingredients, the product meets the classification criteria for this hazard class - serious eye damage.

Respiratory or skin sensitisation

No data is available for the product.

Base on the data for the ingredients, the product meets the classification criteria for this hazard class - may cause an allergic skin reaction.

Germ cell mutagenicity

No data is available for the product.

Base on the data for the ingredients, the product does not meet the classification criteria for this hazard class.

Carcinogenicity

No data is available for the product.

Base on the data for the ingredients, the product does not meet the classification criteria for this hazard class.

Reproductive toxicity

No data is available for the product.

The product contains ingredients classified as toxic for reproduction (Category 1B) - Benzaldehyde, 2-hydroxy-5-nonyl-, oxime.

Base on the data for the ingredients, the product is classified as potentially harmful to fertility and possibly harmful to the unborn child.

STOT - single exposure

No data is available for the product.

The product is classified as toxic to target organs - after a single exposure.

STOT - repeated exposure

No data is available for the product.

Base on the data for the ingredients, the product is not classified as toxic to target organs - after repeated exposure.

Aspiration hazard

No data is available

Immediate effects as well as chronic effects from short exposure:

Inhalation	Exposure to vapors / mist causes irritation of the mucous membranes of the upper respiratory tract, coughing, headaches and dizziness; higher concentrations of vapors cause nausea, vomiting; prolonged exposure or high concentrations causes disorders of the central nervous system, drowsiness, breathing disorders.
Eye contact	It is corrosive. Exposure to high concentrations of vapors or contact with the sprayed liquid causes irritation of the mucous membranes of the eyes; splashing the liquid into the eye causes burning, redness and tearing. May damage eyes.
Skin contact	Direct, prolonged contact causes cracking and peeling of the skin as a result of its drying and degreasing; causes skin irritation on prolonged or frequent contact. May cause an allergic skin reaction.
Ingestion	In case of ingestion, gastric disorders (nausea, vomiting, abdominal pain) and disorders in the central nervous system and breathing disorders similar to those in inhalation (headache and dizziness, psychomotor disorders, convulsions, loss of consciousness) may occur.

SECTION 12: ECOLOGICAL INFORMATION
12.1. TOXICITY

Base on the content of the ingredients, the product is classified as toxic to the aquatic environment with long-lasting effects.

Product / substance	Result	Species	Exposure
Isopropanol	LC ₅₀ = 9640 mg/l	Fish - <i>Pimephales promelas</i>	96 h
	LC ₅₀ = 8970 mg/l	Fish - <i>Leuciscus idus melanotus</i>	48 h
	EC ₅₀ = 9714 mg/l	<i>Daphnia magna</i>	24 h

12.2. PERSISTENCE AND DEGRADABILITY

Isopropanol

Is substantially biodegradable: > 70 % after 10 days

Mixture of C6 hydrocarbons, isoalkanes and C7 hydrocarbons, n-alkanes, isoalkanes, cyclic

It is rapidly biodegradable. Conversion as a result of hydrolysis and photolysis should not be significant. It degrades rapidly in the air.

12.3. BIOACCUMULATIVE POTENTIAL

Product components are not expected to be bioaccumulative.

Ingredient	Log Pow	BCF	Potential
Isopropanol	0,05	--	--
Mixture of C6 hydrocarbons, isoalkanes and C7 hydrocarbons, n-alkanes, isoalkanes, cyclic	No data		

12.4. MOBILITY IN SOIL

The product partially evaporates quickly from the soil surface, partially penetrates into the soil and groundwater.

Isopropanol

Unlimitedly soluble in water. Volatile, evaporates very easily.

Mixture of C6 hydrocarbons, isoalkanes and C7 hydrocarbons, n-alkanes, isoalkanes, cyclic

Volatile, evaporates very quickly. Deposition in sludge and solids in sewage is not expected.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

The product does not contain ingredients that meet the PBT or vPvB criteria according to Annex XIII of the REACH regulation.

12.6. OTHER ADVERSE EFFECTS

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

As far as possible, reduce or eliminate the formation of waste.

13.1. WASTE TREATMENT METHODS

Waste treatment/disposal methods - unused products

The product is harmful to the aquatic environment! Do not dispose of it into the sewage system. Do not allow contamination of surface and ground water. Do not store at municipal landfills. Consider the possibility of use. Waste product should be disposed of in accordance with applicable regulations.

Waste treatment/disposal methods - contaminated packaging

Recovery / recycling / waste disposal of packaging should be carried out in accordance with applicable regulations.

Waste packaging should be recycled. Incineration or landfilling should only be considered when recycling is not possible.

CAUTION: Only completely emptied and cleaned packages can be recycled!

Use the services of companies with appropriate permissions.

Special precautions


Dispose of the product and its packaging in a safe way. Empty, uncleaned, or unrinsed containers handle carefully. Empty containers may contain product residues (liquid / vapor) and may pose a fire / explosion and health hazard. Avoid spreading of the released material and its runoff to soil, water and sewage systems.

SECTION 14: TRANSPORT INFORMATION

The product is classified as a dangerous material according to the RID, ADR, ADN, IMDG and IATA transport regulations for the transport of dangerous goods.

14.1.	UN NUMBER	UN 1139
14.2.	UN PROPER SHIPPING NAME	COATING SOLUTION (Isopropanol, Gasoline extraction)
14.3.	TRANSPORT HAZARD CLASS(ES)	3
14.4.	PACKING GROUP	II
14.5.	ENVIRONMENTAL HAZARDS	NO
14.6.	SPECIAL PRECAUTIONS FOR USER	Not applicable
14.7.	TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE	
		Not applicable

Additional information for land transport ADR and RID

Classification code	F1				
Hazard identification number	33	Labels		no. 3	
Limited quantities:	5 L				

SECTION 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (as amended).

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) L 132/8 from 29.05.2015

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 L 353 from 31.12.2008 (as amended).

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

Substances subject to authorisation - Annex XIV to REGULATION (EC) No 1907/2006 (REACH) - Not applicable.

Substances of Very High Concern (SVHC) - Candidate list: Not applicable.

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles - Annex XVII to REGULATION (EC) No 1907/2006 (REACH): Not applicable.

15.2. CHEMICAL SAFETY ASSESSMENT

No chemical safety assessment was carried out for product.

SECTION 16: OTHER INFORMATION

Literature and data sources

Safety Data Sheet prepared on the basis of data from the SDS / MSDS supplied by the manufacturer, current knowledge of the supplier and valid EU regulations.

Revisions: Not applicable - first version.

The content of symbols and H phrases given in the section 3

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Flam. Liq. 2	Flammable liquid, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Skin Irrit. 2	Causes skin irritation, Category 2
Skin Sens. 1	May cause an allergic skin reaction, Category 1
Eye Dam. 1	Causes serious eye damage, Category 1
Eye Irrit. 2	Eye Irritant, Category 2
STOT SE 3	May cause drowsiness or dizziness, Category 3
Repr. 1B	Suspected of damaging fertility. Suspected of damaging the unborn child, Category 1B
Aquatic Chronic 1	Toxic to aquatic life with long lasting effects, Category 1
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects, Category 2

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H319	Causes serious eye irritation.
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.

Explanation of abbreviations and acronyms

CLP	Classification, labelling and packaging (Regulation (EC) No 1272/2008)
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
TLV	Threshold limit value
STEL	Short-term exposure limit
PEL	Permissible exposure limit
DNEL	Derived no-effect level
PNEC	Predicted No Effect Concentration
vPvB	(Substance) very persistent and very bioaccumulative
PBT	Substance) persistent, bioaccumulative and toxic
CMR	Carcinogenic, Mutagenic, Reprotoxic Substances
LD ₅₀	Median lethal dose
LC ₅₀	Median lethal concentration
EC ₅₀	Half maximal effective concentration
NOEC	No Observed Effect Concentration
Log Pow	partition coefficient n-octanol – water
BCF	Bioconcentration factor
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association

Health protection information

Workers professionally exposed to the product should be trained in the scope of health risks and precautions to be taken to limit exposure, hygiene requirements, the need to use personal protective equipment, measures to prevent accidents and emergencies, and appropriate rescue actions.

The safety data sheet is not a product quality certificate. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

The user of the product is obliged to comply with all applicable standards and regulations, and is also responsible for improper use of the information contained in the Data Sheet or the use of the product contrary to the intended use.

In the case of specific applications, the exposure assessment should be performed and appropriate rules of conduct and training programs ensuring occupational safety should be developed.

END OF SAFETY DATA SHEET