SAFETY DATA SHEET

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

1.1. Product identifier

Product name Nasiol NL272

Product description Durable Hydrophobic Nano-Coating Solution for Related Common Appropriate

Surfaces

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

Identified uses Paint protection for related surfaces.

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Artekya Teknoloji Limited Şirketi

Ziyagokalp Mah, Heskop San. Sit. M10/189 34490 Basaksehir – Istanbul / TURKEY Tel: +90 (212) 670 13 95

Tel: +90 (212) 670 13 95 Fax: +90 (212) 310 59 58 info@artekya.com

1.4. Emergency telephone number

Emergency telephone Artekya Tel: +90 (532) 769 44 27

+90 (212) 670 13 95

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not classified

Health hazards Asp. Tox. 1 – H304

Environmental hazards Not classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.

Precautionary statements P102 Keep out of reach of children.

P261 Avoid breathing vapors.





P280 Wear protective clothing, gloves, eye and face protection.

P301+310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P405 Store locked-up.

P501 Dispose of contents/container in accordance with national regulations.

Contains Distillates (petroleum), hydrotreated light.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance Name	Identification Numbers	Classification	Concentration (wt%)
Distillates (petroleum), hydrotreated light	CAS Number: 64742-4 <mark>7-</mark> 8 EC Number: 265-149-8	Asp. Tox. 1 – H304	>85

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General Information Get medical attention immediately. Show this Safety Data Sheet to the medical

personnel.

Inhalation Remove affected person from source of contamination. Move affected person to

fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting unless under the

direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery

position and ensure breathing can take place.

Skin contact Wash skin thoroughly with soap and water or use an approved skin cleanser. After

contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention if irritation persists after

washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open

eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any

rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous

for first aid personnel to carry out mouth-to-mouth resuscitation.





4.2. Most important symptoms and effects, both acute and delayed

General information See Section 11 for additional information of health hazards. The severity of the

symptoms described will vary dependent on the concentration and the length of

exposure.

Inhalation Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach. Fumes from the stomach

contents may be inhaled, resulting in the same symptoms as inhalation. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may

cause chemical pneumonitis.

Skin contact May cause an allergic skin reaction.

Eye contact May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing

media

The product is not flammable. Extinguish with foam, carbon dioxide, dry powder or

water fog.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure

build-up.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following

substances: Harmful gases or vapors.

5.3. Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a

basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautionsNo action shall be taken without appropriate training or involving any personal risk.

Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency





decontamination and disposal are in place. Do not touch or walk into spilled material. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions

Immiscible with water. Spills may have hazardous effects on the environment. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small spillages: Collect spillage. Large spillage: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Avoid contact with skin. Take

precautionary measures against static discharge.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent. Use containers made of the following materials: Teflon Polyethylene. Carbon steel. PP; Polypropylene.

Unsuitable container materials: PS; Polystyrene. Rubber. EPDM; Ethylene Propylene Diene Monomer.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses of this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment











Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.





Color Colorless.

Odor Characteristic.

Odor threshold No information available.

pH 5.5-6.0

Melting point -22°C

Initial boiling point and

range

170°C (at 0.4kPa)

Flash point 68°C

Evaporation rate 1.4

Flammability (solid, gas) Not applicable.

Upper/lower flammability

or explosive limits

Upper flammable/explosive limit: 0.9 %(V) Lower flammable/explosive limit: 1.2 %(V)

Vapor pressure 1 kPa

Vapor density >2.5

Relative density No information available.

Density 0.87 g/cm³

Solubility(ies) Immiscible with water.

Partition coefficient No information available.

Auto-ignition temperature 285°C

Decomposition temperature

No information available.

Viscosity No information available.

Explosive propertiesNo information available.

Oxidizing properties Not available.

9.2. Other information

Volatility

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Reacts with water and moisture in the air.

10.2. Chemical Stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable

under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

No potentially hazardous reactions known.





10.4. Conditions to avoid

Conditions to avoid Avoid heat. Containers can burst violently or explode when heated, due to

excessive pressure build-up.

10.5. Incompatible materials

Materials to avoid Peroxides. Oxidizing materials. Acids.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances:

Harmful gases and vapors. Organic amine vapors.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance Name	Exposure Route	Dose	Species
Distillates (petroleum), hydrotreated light	Oral	LD50 2000 mg/kg	Rat
	Dermal	LD50 2000 mg/kg	Rat
	Inhalation (4h) Vapor	LC50 5000 mg/m³	Rat

Skin corrosion/irritation

Skin corrosion/irritationBased on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/

irritation

Based on available data the classification criteria are not met.

Respiratory sensitization

Respiratory sensitizationBased on available data the classification criteria are not met.

Skin sensitization

Skin sensitizationBased on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity – in vitroBased on available data the classification criteria are not met.

Carciogenicity

Carciogenicity Based on available data the classification criteria are not met.

IARC carcinogenicityNone of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity -Based on available data the classification criteria are not met.

fertility

Reproductive toxicity -Based on available data the classification criteria are not met.

development





Specific target organ toxicity - single exposure

STOT – single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT – repeated exposure Not classified as a specific target organ toxicant after a single exposure.

Aspiration hazard

Aspiration hazard Asp. Tox. 1 – H304 May be fatal if swallowed and enters airways. Pneumonia may

be the result if vomited material containing solvents reaches the lungs.

SECTION 12: Ecological information

EcotoxicityThe product components are not classified as environmentally hazardous.

However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

12.2. Persistance and degradability

Persistance and The product is expected to be biodegradable. Oxidises rapidly by photo-chemical

reactions in air.

degradability

12.3. Bioaccumulative potential

Bioaccumulative potential The product contains potentially bioaccumulating substances.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product is insoluble in water. The product is immiscible water and will spread

on the water surface. Volatile liquid. The product contains organic solvents which

will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

12.6. Other adverse effects

This substance is not classified as PBT or vPvB according to current EU criteria.

Other adverse effects None known.

SECTION 13: Disposal consideration

13.1. Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible.

Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers on liners

may retain some product residues and hence be potentially hazardous.

Disposal methodsDo not empty into drains. Dispose of surplus products and those that cannot be

recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should





be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN Number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous No. **substance/marine product**

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPEL and the IBC Code

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

Not applicable.

SECTION 15: Regulatory information

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits.

EU legislation 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, Authorization and Restriction of Chemicals (REACH) Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and

Restriction of Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Regulation (EC) No 1272/2008, CLP

Authorizations (Title VII Regulation 1907/2006)

No specific authorizations are known for this product.





Restrictions (Title VII Regulation 1907/2006)

No specific restrictions on use are known for this product.

Seveso Directive – Control of major accident hazards

Not applicable.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in this safety data sheet

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.

RID: European Agreement concerning the International Carriage of Dangerous

Goods by Rail.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Code for Dangerous Goods.

CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.

LC₅₀: Lethal Concentration to 50% of a test population.

LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).

EC₅₀: 50% of maximal Effective Concentration. IC₅₀: Half maximal Inhibitory Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Verp Persistent and Very Bioaccumulative.

Chemical abbreviations

and acronyms

Asp. Tox. = Aspiration hazard

General information Only trained personnel should use this material.

Key literature references and sources for data

Source: European Chemical Agency, http://echa.europa.eu/

Training advice Read and follow manufacturer's recommendations. Only trained personnel should

use this material.

Revision comments This is the first issue.

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Hazard statements in full H304 may be fatal if swallowed and enters airways.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



