According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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

1.1 Product identifier

Commercial ProductName: Nasiol-ZR53

Producttype: Thermoset Thermoplastic Nano Coating Solution

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

Relevent identified uses: Paint Protection for automobile body.

1.3 Details of the supplier of the safety data sheet supplier (manufacturer/importer/Downstream user/distributor)

Company:ARTEKYADAN. AR-GE TEKS<mark>TIL M</mark>AKINA SAN. VE TICARET LTD. STI.

ZiyagokalpMh.Heskoop San.Sit.M7Blok No:122

34000 Basaksehir-Istabul/TURKEY

Telephone:00902126701395

Fax:00902123105958

E-mail: info@artekya.com

Dept.responsible for information:

E-mail(competent person) info@artekya.com

1.4Emergency telephone number

24Hour Environmental/HealthEmergency Telephone: 00905327694427

TransportationEmergencyPhoneNumber00902126701395

National Poison Control Center: UZEM 114(TURKEY)

SECTION 2: HazardsIdentification

2.1 Classification of the substance or mixture

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

AspirationToxicity Category 1

H304: May be fatal if swallowed and enters airways

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; R65 Harmful may cause lung damage if swallowed.



S Words:

S2: Keep out of the reach of children.

S46:If swallowed, seek medical advice immediately and show this container or label.

S61: Avoid release to the environment. Refer to special instructions/safety data sheet

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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OSHA Hazard Communication Standard

HMISRatings (scale 0-4)

HEALTH:1FLAMMABILITY:1REACTIVITY:0

PHYSICAL/CHEMICAL EFFECTS

Material canreleasevapours thatreadilyform flammablemixtures. Vapour accumulation couldflashand/or explode if ignited. Material can accumulate static charges, which may cause an ignition.

HEALTH EFFECTS

Repeatedexposure may causeskindryness or cracking. If swallowed, may be aspirated and cause lung damage. May be irritating to the eyes, nose, throat, and lungs.

NOTE:Thismaterial shouldnotbeusedfor anyother purposethantheintendedusein Section1withoutexpert advice. Healthstudies have shown that chemical exposure may cause potential human healthrisks, which may vary from persont operson.

2.2 Label Elements

The product is classified and labelled according to EC directives or corresponding national laws.

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard Pictograms



Danger

GHS08

Hazard Statements:

H304: May be fatal if swallowed and enters airways

Precautionary Statements:

Response Precautionary Statements:

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

P331: Do NOT induce vomiting.

Storage Precautionary Statements:

P405: Store locked up.

Disposal precautionary statements:

P501: Dispose of contents/container to ... [... in accordance with local/regional/national/international regulation (to be specified)].

2.30ther Hazards

None known.

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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SECTION 3:Composition Information

3.1 Mixtures

Hazardous ingredients

Classification according to Regulation (EC) No. 1272/2008 [CLP]

IDENTITY % CAS NO. EC NO ECINDEXNO HAZARD

CLASSIFICATION

- HYDROCARBONS >85 64742-47<mark>-8</mark> 265-149-8 649-422-00-2 Asp. Tox. 1 H304

-COMMERCIALLY

CONSERVEDFORMULA <35 - -

Additional information

For explanation of abbreviations see section 16.

SECTION 4:FirstAidMeasures

4.1. Description of first aid measures

INHALATION

Removefrom furtherexposure. For those providing assistance, avoid exposure to your self or others. Use a dequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical deviceoruse mouth-to-mouth resuscitation.

SKIN CONTACT

Washcontactareas withsoapandwater. Removecontaminated clothing.Launder contaminated clothing beforereuse.

EYECONTACT

Flush thoroughlywithwater. Ifirritation occurs, getmedicalassistance.

INGESTION

Seek immediate medical attention. Donotinducevomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

NOTETOPHYSICIAN

Ifingested,material maybe aspirated into thelungs and cause chemical pneumonitis. Treatappropriately

SECTION5.FIREFIGHTINGMEASURES

5.1Extinguishing Media

Appropriate ExtinguishingMedia:Usewaterfog,foam,drychemicalor carbon dioxide (CO2) to extinguishflames.

Inappropriate ExtinguishingMedia:Straightstreams ofwater

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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5.2. Special hazards arising from the substance or mixture

HazardousCombustion Products:Smoke,Fume,Incompletecombustion products,Oxides ofcarbon Preventrun-offfromfirecontrolordilutionfrom enteringstreams,sewers or drinkingwater supply.

5.3 Advice for firefighters

Evacuate area. Fire fighters should use standard protective equipmentand inenclosed spaces, self-contained breathing apparatus (SCBA). Usewater spraytocool fire-exposed surfaces and to protect personnel.

SECTION 6: ACCIDENTAL RELEASEMEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoidcontactwithspilled material. Use personal protective equipment. SeeSection 5forfirefightinginformation. Seethe Hazard Identification Sectionfor SignificantHazards. SeeSection4for First AidAdvice. SeeSection8for Personal Protective Equipment.

6.2. Environmental precautions

SpillManagement

Land Spill:Stopleak ifyou candosowithoutrisk.Note: Local regulationsmayprescribe or limitaction tobetaken.

WaterSpill:Prevent product from entering drains.

Stop leak ifyou cando sowithoutrisk. Warnother shipping. Note: Local regulations may prescribe or limitaction to be taken.

Notification Procedures

In the event of aspill or accidental release, notify relevant authorities in accordance with all applicable regulations.

6.3. Methods and material for containment and cleaning up

Land Spill:

Absorbor cover with dryearth, sandor othernoncombustible material and transfer tocontainers. Recover bypumpingor with suitable absorbent.

WaterSpill: Removefromthe surface byskimmingor

withsuitableabsorbents. Seektheadvice of aspecialist before using dispersants. Water spill and landspill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of awater spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted.

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



SECTION 7: Handling And Storage

7.1. Precautions for safe handling

Advices on safe handling

Avoidcontactwithskin.Useproper bonding and/orearthing procedures. However, bonding andearthingmaynot eliminatethehazardfromstaticaccumulation.Preventsmall spills and leakage to avoidsliphazard.Material canaccumulatestatic charges whichmaycause an electrical spark (ignition source).When thematerial is handledinbulk, an electrical spark couldigniteanyflammablevaporsfrom liquidsor residues thatmaybepresent(e.g., during switch-loadingoperations).Consult local applicablestandardsforguidance.

Precautions against fire and explosion:

Material canreleasevapours thatreadilyform flammable mixtures. Vapour accumulation couldflashand/or explode if ignited. Material can accumulate static charges, which may cause an ignition.

Loading/UnloadingTemperature:[Ambient] TransportPressure:[Ambient] TransportPressure:[Ambient]

Static Accumulator:This material is a static accumulator. Aliquidistypicallyconsidereda nonconductive, static accumulator if its conductivity is below 100 pS/m(100x10E-12 Siemensper meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether aliquidis nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, antistatic additives and filtration can greatly influence the conductivity of a liquid.

7.2. Conditions for safe storage, including any incompatibilities

Storage:

Thecontainer choice, for examplestorage vessel, mayeffect static accumulation and dissipation. Donots to reinopenor unlabelled containers. Keep container closed. Handle containers with care. Open slowly in order to control possible pressurer elease. Store in a cool, well-ventilated area.

StorageTemperature:[Ambient]

Storage Pressure:[Ambient]

SuitableContainers/Packing:Tank Cars; Barges;Drums;TankTrucks

SuitableMaterialsandCoatings(Chemical Compatibility): Teflon; Polyethylene;Carbon

Steel;Polypropylene

UnsuitableMaterialsand Coatings:Polystyrene;Butyl Rubber; Natural Rubber;Ethylene- proplyene-dienemonomer (EPDM)

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use. Read label before use.

SECTION8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control parameters

Engineering Controls:Thelevel ofprotectionandtypes ofcontrols necessarywillvarydependinguponpotential exposure conditions.Controlmeasurestoconsider:Adequateventilation shouldbe providedsothatexposure limitsare notexceeded

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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8.2. Exposure controls

PersonalProtection

Personal protective equipmentselections varybased onpotential exposure conditions such asapplications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, asprovided below, is based upon intended, normal usage.

RespiratoryProtection: Ifengineering controls donot maintain airborne contaminant concentrations at alevel which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator

For high airborneconcentrations, use an approved supplied-airrespirator, operated in positive pressuremode. Supplied airrespirators with an escape bottlemay be appropriate when oxygen levels are inadequate, gas/vapourwarning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific useconditions. Contact the glove manufacture for specificative on glove selection and breakthrough times for your useconditions. In spect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If prolonged or repeatedcontactis likely, chemical-resistant gloves are recommended. If contact with forearms is likely, wear gaunt let-style gloves.

Eye Protection:Ifcontactis likely,safetyglasses withside shieldsare recommended. SkinandBodyProtection:Anyspecific clothinginformation provided based onpublished literatureor manufacturer data. Thetypes of clothingtobe considered for this material include: If prolonged or repeated contactis likely, chemical, and oil resistant clothing is recommended.

Specific HygieneMeasures: Always observe good personalhygienemeasures, such as washing after handling thematerial and before eating, drinking, and/or smoking. Routinely washwork clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practicegoodhousekeeping.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010

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SECTION 9: Physical Data

9.1. Information on basic physical and chemical properties

Form:Liquid

Colour:Colourless
Odor: Characteristic
BoilingPoint: 175°@4mm
Specific Gravity:0.88
Vapor Density(air=1): >2.52

%volatiles:%100

Autoignitiontemperature:275°C Explosionlimits:Lower: 0.9%v/v

9.2. Other information

No data available

FreezingPoint:-25°C

VaporPressure,10 mmHg@20°C Solubilityinwater:nonmiscible

Evaporationrate:1.4 FlashPoint: 69°C Upper:12%v/v

SECTION 10: StabilityAndReactivity

10.1.Reactivity

Reactswithwater andmoistureinairliberating methanol.

10.2. Chemical stability:

Stableinsealedcontainers stored.

10.3. Possibility of Hazardous Reactions

Reactswithwater andmoistureinairliberating methanol.

10.4. Conditionstoavoid:

Combustible; avoid contact with heat, sparks or open flame.

10.5. Incompatibility(materials to avoid):

Avoidcontactwith peroxides, oxidizing agents, alcohols, acids.

10.6. Hazardousdecomposition products:

Organicaminevapors.

SECTION 11:ToxicologicalInformation

11.1. Information on toxicological effects

Basisfor Assessment: Informationgivenis basedonproducttesting, and/or similar products, and/or components.

Acute OralToxicity: Expectedtobeoflowtoxicity:LD50>2000mg/kg, Rat Aspirationinto thelungs whenswallowed or vomitedmaycausechemical pneumonitis, which can be fatal.

AcuteDermalToxicity: Expected to be of low toxicity: LD50>2000 mg/kg, Rat Acute InhalationToxicity: Low toxicity: LC50 greater than near-saturated vapour concentration./4hours, Rat

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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SkinIrritation: Maycausemoderate skinirritation(butinsufficienttoclassify). Prolonged/repeatedcontactmaycausedefattingoftheskin, which canleadtodermatitis. Eye Irritation: Essentiallynon-irritating toeyes.

RespiratoryIrritation: Not expected to be are spiratoryirritant.

Sensitisation: Notexpected to be askinsensitiser.

RepeatedDoseToxicity:Kidney:causedkidneyeffectsinmalerats, whichare not considered relevant to humans.

Mutagenicity: Notexpected to be mutagenic.

Carcinogenicity:Repeatedexposure causesskintumourpromotioninexperimental animals.

Reproductive and Developmental Toxicity: Notexpected to be adevelopmental toxicant. Not expected to impair fertility

SECTION 12:Ecological Information

12.1.Toxicity

Acute Toxicity
Ingestion:Toxicity:LD50>13450 mg/kg
Skin:Toxicity:LD50>3240mg/kg

Toxicity to Fish and Aquatic Invertebrates: Lowtoxicity:LC/EC/IC50>980mg/l

Toxicity to Algae:Lowtoxicity:LC/EC/IC50>9800mg/l

12.2. Persistence/degradability:

Expected tobereadilybiodegradable. Oxidises rapidlybyphoto-chemical reactions in air.

12.3.Bioaccumulation potential

Hasthepotentialtobioaccumulate.

12.4. Mobility

Floatsonwater. Adsorbstosoilandhas lowmobility.

12.5. Results of PBT andvPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No further relevant information available.

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010



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SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system and surface water.

Uncleanedpackagings: ·

Recommendation:

Waste disposal must meet criterias of both official and directives of 2008/98/EC, covering waste and dangerous waste

USA EPA

Chemical waste generatorsmustdeterminewhether adiscardedchemical is classified as ahazardous waste. US EPAguidelines for the classification determination are listed in 40 CFRP arts 261.3. Additionally, waste generators must consult state and local hazardous waster equilation stoen sure complete and accurate classification.

SECTION 14.Transport Information

LAND(TDG): NotRegulatedforLandTransport

LAND(DOT): NotRegulatedforLandTransport

SEA(IMDG): NotRegulatedforSeaTransport according toIMDG-Code

AIR (IATA): NotRegulatedfor AirTransport.

SECTION 15.RegulatoryInformation

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

WHMISClassification: Notcontrolled

Thisproducthas been classified in accordance with hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations.

CEPA:Allcomponentsofthis materialare either on the Canadian Domestic Substances List (DSL), exempt, or have been notified under CEPA.

NATIONALCHEMICAL INVENTORYLISTING: AICS, IECSC, DSL, EINECS, ENCS, KECI.PICCS.TSCA

The Following Ingredients are Citedonthe Lists Below: None.

--REGULATORYLISTSSEARCHED--

1= TSCA4,3= TSCA 5e5=TSCA12b

2= TSCA5a24=TSCA66= NPRI

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

According to Regulation (EC) No. 1907/2006 According to Regulation (EU) No. 453/2010

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SECTION 16: Other Information

Abbreviations:

ND: Not Determined, No Data; NA: NotApplicable; LD: Lethal Dose, LC: Lethal Concentration:HMIS: Hazardous Material information System:

CAS No.: Chemicial Abstract Service Registration Number,

EC no: European Commission Number,

OEL:Observable effect level

WHMIS:WorkplaceHazrdous material information system,

TWA:Time weighted average

ACGIH: American conference of industrial hygienist

TLV:Test of limit values

STEL: Short term exposure limitTSCA:The substance central act

CLA: Comprehensive environmental, response, compensation and liability act

OSHA:Occupation safety and health administration

DSL: Domestic substance list

NDSL: Non domestic substance list

AICS: Australian inventory of chemical substances

IECSC:Inventory of exiating chemical substances produced or imported in China

EINECS: European inventory of existing commercial chemical substances

KECI: Korean existing chemical inventory

PICS: Philippine inventory of chemical substances

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Revision#1Date:19/08/2013 Revision#2Date:15/06/2015

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Prepared by R&D dep.Revised by Cem Dursunoglu (Code Art22)

TSE Approved MSDS Specialist(GBF1877)

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SAFETY DATA SHEETAccording to Regulation (EC) No. 1907/2006
According to Regulation (EU) No. 453/2010



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