

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

- Product identifier
- Trade name: **MARISEAL 770**
- Relevant identified uses of the substance or mixture and uses advised against
No relevant identified uses - mixture of substances.
- Application of the substance / the preparation **Polyurethane sealer**
- Details of the supplier of the safety data sheet
MARIS POLYMERS SA
Industrial Area of Inofita
Inofita, Voiotia
Tel: +30 22960 32918
Fax: +30 22960 32919
e-mail: info@marispolymers.gr
- Emergency telephone number:
Poisoning Centre in Athens, Greece
Phone: +30 2107793777

2 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

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



Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.



Xi; Irritant

R38: Irritating to skin.

R10: Flammable.

- Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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·Classificationsystem:

TheclassificationisaccordingtothelatesteditionsoftheEU-lists,andextendedby companyandliteraturedata.

·Labelements

·LabellingaccordingtoEUguidelines:

TheproducthasbeenclassifiedandmarkedinaccordancewithEUDirectives/
OrdinanceonHazardousMaterials.

·Codeletterandhazarddesignationofproduct:



XnHarmful

·Hazard-determiningcomponentsoflabelling:

xylene

·Riskphrases:

- 10 Flammable.
- 20/21Harmfulbyinhalationandincontactwithskin.
- 38 Irritatingtoskin.

·Safetyphrases:

- 9 Keepcontainerinawell-ventilatedplace.
- 16 Keepawayfromsourcesofignition-Nosmoking.
- 23 Donotbreathegas/fumes/vapour/spray(appropriate wordingtobespecified bythemanufacturer).
- 33 Takeprecautionarymeasuresagainststaticdischarges.
- 36/37Wearsuitableprotectiveclothingandgloves.
- 46 Ifswallowed,seekmedicaladviceimmediatelyandshowthiscontaineror label.
- 60 Thismaterialanditscontainermustbedisposedofashazardouswaste.

·Otherhazards

·ResultofPBTandvPvBassessment

·PBT:Notapplicable.

·vPvB:Notapplicable.

3Composition/informationoningredients

·Chemicalcharacterization:Mixtures















·Description:Mixture:consistingofthefollowingcomponents.

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·Components:

<p>CAS:1330-20-7 EINECS:215-535-7 Indexnumber:601-022-00-9</p>	<p>xylene  XnR20/21  XiR38 R10 -----  Flam.Liq.3,H226  AcuteTox.4,H312;AcuteTox.4,H332;SkinIrrit.2,H315</p>	<p>35-55%</p>
<p>CAS:123-86-4 EINECS:204-658-1 Indexnumber:607-025-00-1</p>	<p>n-butylacetate R10-66-67 -----  Flam.Liq.3,H226  STOTSE3,H336</p>	<p>5-25%</p>
<p>CAS:4098-71-9 EINECS:223-861-6 Indexnumber:615-008-00-5</p>	<p>3-isocyanatomethyl-3,5,5-trimethylcyclohexylisocyanate  TR23  XnR42/43  XiR36/37/38  NR51/53 -----  AcuteTox.3,H331  Resp.Sens.1,H334  AquaticChronic2,H411  SkinIrrit.2,H315;EyeIrrit.2,H319;SkinSens.1,H317;STOTSE3,H335</p>	<p>≤2.5%</p>

4Firstaidmeasures

- Descriptionoffirstaidmeasures
- Generalinformation:
Symptomsofpoisoningmayevenoccurafterseveralhours;thereforemedical observationforatleast48hoursaftertheaccident.
Takeaffectedpersonsoutintothefreshair.
Seekimmediatemedicaladvice.
- Afterinhalation:
Supplyfreshairandtobesurecallforadoctor.
Incaseofunconsciousnessplacepatientstablyinsidepositionfortransportation.
Supplyfreshair.Ifrequired,provideartificialrespiration.Keeppatientwarm.
Consultdoctorifsymptomsersist.
- Afterskincontact:Immediatelywashwithwaterandsoapandrinsethoroughly.

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- Aftereyecontact:
Rinseopenedeyeforseveralminutesunderrunningwater.Ifsymptomsersist, consultadoctor.
- Afterswallowing:Rinsemouth.Consultadoctorforsafetyreasons.
- Informationfordoctor:
- Mostimportantsymptomsandeffects,bothacuteanddelayed
Nofurtherrelevantinformationavailable.
- Indicationofanyimmediatemedicalattentionandspecialtreatmentneeded
Nofurtherrelevantinformationavailable.

5 Firefighting measures

- Extinguishingmedia
- Suitableextinguishingagents:



CO₂, sand, extinguishing powder. Do not use water.

- Forsafetyreasonsunsuitableextinguishingagents:Waterwithfulljet
- Specialhazardsarisingfromthesubstanceormixture
Nofurtherrelevantinformationavailable.
- Adviceforfirefighters
- Protectiveequipment:Mouthrespiratoryprotectivedeviceandprotectiveclothes.
- Additionalinformation
Collectcontaminatedfirefightingwaterseparately.Itmustnotenterthesewage system.

6 Accidental release measures

- Personalprecautions,protectiveequipmentandemergencyprocedures
Wearprotectiveequipment.Keepunprotectedpersonsaway.
- Environmentalprecautions:
Donotallowtoentersewers/surfaceorgroundwater.
- Methodsandmaterialforcontainmentandcleaningup:
Absorbwithliquid-bindingmaterial(sand,diatomite,acidbinders,universal binders,sawdust).
Disposecontaminatedmaterialaswasteaccordingtoitem13.
Ensureadequateventilation.
Donotflushwithwateroraqueouscleansingagents
- Referencetoothersections
SeeSection7forinformationonsafehandling.

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SeeSection8forinformationonpersonalprotectionequipment.
SeeSection13fordisposalinformation.

7 Handling and storage

- Handling:
- Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
- Information about fire- and explosion protection:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility:
Store away from foodstuffs.
- Further information about storage conditions: Keep container tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls / personal protection

- Additional information about design of technical facilities:
No further data; see item 7.

Control parameters

- Ingredients with limit values that require monitoring at the workplace:

1330-20-7 xylene

WEL Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

123-86-4 n-butylacetate

WEL Short-term value: 966 mg/m³, 200 ppm
Long-term value: 724 mg/m³, 150 ppm

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4098-71-93-isocyanatomethyl-3,5,5-trimethylcyclohexylisocyanate

WELShort-termvalue:0.07mg/m³
Long-termvalue:0.02mg/m³
Sen;as-NCO

·Additionalinformation:The listsvalidduringthemakingwereusedasbasis.

·Exposurecontrols

·Personalprotectiveequipment:

·Generalprotectiveandhygienicmeasures:

Keepawayfromfoodstuffs,beveragesandfeed.

Washhandsbeforebreaksandattheendofwork.

Avoidcontactwiththeskin.

·Respiratoryprotection:



Incaseofbriefexposureorlowpollutionuserrespiratoryfilterdevice.In caseofintensiveorlongerexposureusesself-containedrespiratory protective device.

·Protectionofhands:



Protectivegloves

Theglovematerialhastobeimpermeableandresistanttotheproduct/the substance/thepreparation.

Duetomissingtestsnorecommendationtotheglovematerialcanbegivenforthe product/thepreparation/thechemicalmixture.

Selectionoftheglovematerialonconsiderationofthepenetrationtimes,ratesof diffusionandthedegradation

·Materialofgloves

Theselectionofthesuitableglovesdoesnotonlydependonthematerial,butalso onfurthermarksofqualityandvariesfrommanufacturerertomanufacturer.

·Penetrationtimeofglovematerial

ThedeterminedpenetrationtimesaccordingtoEN374partIIIarenotperformed underpracticalconditions.Thereforeamaximumwearingtime,whichcorresponds to50%ofthepenetrationtime,isrecommended.

·Eyeprotection:



Safetyglasses

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·Bodyprotection:



Protectiveworkclothing

9Physicalandchemicalproperties

·Informationonbasicphysicalandchemicalproperties

·GeneralInformation

·Appearance:

Form: liquid

Colour: Transparent

·Odour: characteristic

·Odourthreshold: Notdetermined.

·pH-value: Notdetermined.

·Changeincondition

Meltingpoint/Meltingrange: Notapplicable.

Boilingpoint/Boilingrange: Notapplicable.

·Flashpoint: 27C.

·Flammability(solid,gaseous): Notapplicable.

·Ignitiontemperature:

Decompositiontemperature: Notdetermined.

·Self-igniting: Productisnotselfigniting.

·Dangerofexplosion: Productisnotexplosive.However,formation ofexplosiveair/vapourmixturesarepossible.

·Explosionlimits:

Lower: Notdetermined.

Upper: Notdetermined.

·Vapourpressure: Notdetermined.

·Densityat20°C: 0.93g/cm³

·Relativedensity: Notdetermined.

·Vapourdensity: Notdetermined.

·Evaporationrate: Notdetermined.

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·Solubilityin/Miscibilitywith water:	Notdetermined.
·Segregationcoefficient(n-octanol/ water):	Notdetermined.
·Viscosity:	
Dynamic:	Notdetermined.
Kinematic:	Notdetermined.
·Solventcontent:	
VOC(EC)	498g/l

10Stabilityandreactivity

- Reactivity
- Chemicalstability
- Thermaldecomposition/conditionstobeavoided:
Stableatenvironmenttemperature.
- PossibilityofhazardousreactionsNodangerousreactionsknown.
- ConditionstoavoidNofurtherrelevantinformationavailable.
- Incompatiblematerials:Nofurtherrelevantinformationavailable.
- Hazardousdecompositionproducts:
Nodangerousdecompositionproductsknown.

11Toxicologicalinformation

- Informationontoxicologicaleffects
- Acutetoxicity:

·LD/LC50valuesrelevantforclassification:

1330-20-7xylene

Oral LD504300mg/kg(rat)

DermalLD502000mg/kg(rabbit)

- Primaryirritanteffect:
- ontheskin:Irritanttoskinandmucousmembranes.
- ontheeye:Noirritatingeffect.
- Sensitization:Nosensitizingeffectsknown.

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- Additionaltoxicologicalinformation:
Theproductshowsthefollowingdangersaccordingtothecalculationmethodof
theGeneralEUClassificationGuidelinesforPreparationsasissuedinthelatest
version:Xn

12 Ecological information

- Toxicity
- Acquatictoxicity:Nofurtherrelevantinformationavailable.
- PersistenceanddegradabilityNofurtherrelevantinformationavailable.
- Behaviourinenvironmentalsystems:
- BioaccumulativepotentialNofurtherrelevantinformationavailable.
- MobilityinsoilNofurtherrelevantinformationavailable.
- ResultsofPBTandvPvBassessment
- PBT:Notapplicable.
- vPvB:Notapplicable.
- OtheradverseeffectsNofurtherrelevantinformationavailable.

13 Disposal considerations

- Wastetreatmentmethods
 - Recommendation
-  Disposal must be made according to National Legislation.



Donotallowproductoreachsewagesystem.

Contactmanufacturerforrecyclinginformation.

- Uncleanedpackaging:
- Recommendation:
Disposal must be made according to official regulations.
Packaging may be reused or recycled after cleaning.

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14Transportinformation

·LandtransportADR/RID(cross-border)



·ADR/RIDclass: 3Flammableliquids.
·UN-Number: 1866
·Hazardlabel: 3
·UNpropershippingname:1866RESINSOLUTION

·MaritimetransportIMDG:



·IMDGClass: 3
·UNNumber: 1866
·Label 3
·Packaginggroup: III
·EMSNumber: F-E,S-E
·Propershippingname: RESINSOLUTION

·AirtransportICAO-TIandIATA-DGR:



·ICAO/IATAClass: 3
·UN/IDNumber: 1866
·Label 3
·Packaginggroup: III
·Propershippingname: RESINSOLUTION

·UN"ModelRegulation":UN1866,RESINSOLUTION,3,III
·SpecialprecautionsforuserWarning:Flammableliquids.
·TransportinbulkaccordingtoAnnexIIofMARPOL73/78andtheIBCCode
Notapplicable.

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15Regulatoryinformation

- Safety,healthandenvironmentalregulations/legislationspecificforthe substanceormixture
- LabellingaccordingtoEUguidelines:
TheproducthasbeenclassifiedandmarkedinaccordancewithEUDirectives/
OrdinanceonHazardousMaterials.
- Codeletterandhazarddesignationofproduct:



XnHarmful

- Hazard-determiningcomponentsoflabelling:
xylene
- Riskphrases:
10 Flammable.
20/21Harmfulbyinhalationandincontactwithskin.
38 Irritatingtoskin.
- Safetyphrases:
9 Keepcontainerinawell-ventilatedplace.
16 Keepawayfromsourcesofignition-Nosmoking.
23 Donotbreathegas/fumes/vapour/spray(appropriate wordingtobespecified
bythemanufacturer).
33 Takeprecautionarymeasuresagainststaticdischarges.
36/37Wearsuitableprotectiveclothingandgloves.
46 Ifswallowed,seekmedicaladviceimmediatelyandshowthiscontaineror
label.
60 Thismaterialanditscontainermustbedisposedofashazardouswaste.
- Chemicalsafetyassessment:ACHemicalSafetyAssessmenthasbeencarriedout.

16Otherinformation

Thisinformationisbasedonourpresentknowledge.However,thisshallnot constituteaguaranteeforanyspecificproductfeaturesandshallnotestablisha legallyvalidcontractualrelationship.

- Relevantphrases
H226 Flammableliquidandvapour.
H312 Harmfulincontactwithskin.
H315 Causeskinirritation.

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- H317 Maycauseanallergicskinreaction.
H319 Causeseriousseyeirritation.
H331 Toxicifinhaled.
H332 Harmfulinhaled.
H334 Maycauseallergyorasthmasymptomsorbreathingdifficultiesif inhaled.
H335 Maycauserespiratoryirritation.
H336 Maycausedrowsinessordizziness.
H411 Toxictoaquaticlifewithlonglastingeffects.
-
- R10 Flammable.
R20/21 Harmfulbyinhalationandincontactwithskin.
R23 Toxicbyinhalation.
R36/37/38Irritatingtoeyes,respiratorysystemandskin.
R38 Irritatingtoskin.
R42/43 Maycausesensitisationbyinhalationandskincontact.
R51/53 Toxictoaquaticorganisms,maycauselong-termadverseeffectsinthe aquaticenvironment.
R66 Repeatedexposuremaycauseskindrynessorcracking.
R67 Vapoursmaycausedrowsinessanddizziness.

·DepartmentissuingMSDS:

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·Contact:MARISPOLYMERSSA

·Abbreviationsandacronyms:

ADR:AccordeuropéensurletransportdesmarchandisesdangereusesparRoute(European AgreementconcerningtheInternationalCarriageofDangerousGoodsbyRoad)
RID:Règlementinternationalconcernantletransportdesmarchandisesdangereusesparchemin defer(RegulationsConcerningtheInternationalTransportofDangerousGoodsbyRail)
IMDG:InternationalMaritimeCodeforDangerousGoods
IATA:InternationalAirTransportAssociation
IATA-DGR:DangerousGoodsRegulationsbythe"InternationalAirTransportAssociation" (IATA)
ICAO:InternationalCivilAviationOrganization
ICAO-TI:TechnicalInstructionsbythe"InternationalCivilAviationOrganization"(ICAO)
GHS:GloballyHarmonizedSystemofClassificationandLabellingofChemicals
VOC:VolatileOrganicCompounds(USA,EU)
LC50:Lethalconcentration,50percent
LD50:Lethaldose,50percent