1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Detail:

Application of the substance / the preparation:

Manufacturer / supplier:

Transparent coating with flexibility 3822

Surface coating

Holland Shielding Systems B.V.

Jacobus Lipsweg 124 3316 BP Dordrecht the Netherlands

phone +31(0)78-2049000 fax +31(0)78-2049008 www.hollandshielding.com info@hollandshielding.com

HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Xn; Harmful

R48/20-63-65: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed

Xi; Irritant R36-38: irritating to skin and eyes

F; highly flammable R11: highly flammable R67: vapours may cause drowsiness and dizziness

Information concerning particular hazards for human and environment

The product has to be labeled due to the calculation procedure of the "general classification guideline for preparations of EU" in the latest valid version.

Classification system

The classification is according to the latest editions of EU-list, and extended by company and literature data.

1330-20-7	Xylene (mix)
108-88-3	Toluene
67-63-0	Propan-2-ol
100-41-4	Ethylybenzene

2.2 Label elements

Labeling according to the EU guidelines

The product has been classified and marked in accordance with the EU directives / ordinance on hazardous materials.

	Code letter and	hazard design	nations
	Xn H	larmful	
F Highly flammable			

	Safety Phrases
7/9	Keep container tightly closed and in a well ventilated place.
16	Keep away from sources of ignition – no smoking.
23	Do not breath fumes/vapour/spray
25	Avoid contact with eyes.
36/37	Wear suitable protective clothing and gloves.
60	This material and its container must be disposed of as hazardous waste.

Revision date: 18-06-2018 www.hollandshielding.com

	Risk Phrases
	RISK PIII dses
11	Highly flammable
36/38	Irritating to skin and eyes
48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
63	Possible risk of harm to unborn child
65	Harmful may cause lung damage if swallowed
67	Vapours may cause drowsiness and dizziness

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: not applicable **vPvB:** not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with non-hazardous additions.



FIRST AID MEASURES

4.1 Description of first aid measures

Symptoms of poising may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation

After skin contact

Immediately wash with water and soap rinse thoroughly

After eye contact

Rinse opened eyes for several minutes under running water. If symptoms persist then consult a doctor.

After swallowing

If symptoms persist consult a doctor

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

No further relevant information available

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No further relevant information available

FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing agents

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents

Water with full jet

5.2 special hazards arising from the substance or mixture

No further relevant information available

5.3 advice for fire fighters

Protective equipment: put on breathing apparatus

ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away

6.2 Environmental precautions

Prevent seepage into sewage system, work pits and cellars.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation

6.4 Reference to other sections

See section 7 for information on safe handling

See section 8 for information on personal protection equipment

See section 13 for disposal information

HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep receptacle tightly sealed.

Ensure good ventilation/extraction at the workplace.

Prevent formations of aerosols

Information about fire - and explosion protection

Keep ignition sources away – Do not smoke Protect against electrostatic charges

7.2 Precautions for safe storage, including and incompatibilities **Requirements to be met by store rooms and receptacles** Store in a cool location.

Information about storage in one common storage facilityNot required

Further information about storage conditions

Keep receptacle tightly sealed Store in cool, dry conditions in well sealed receptacles

7.3 Specific end use(s)

No further relevant information available

EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities:

No further data; see item 7

8.1 Control Parameters

1330-20-7 Xylene (mix) WEL	Short term value: 441 mg/m³, 100ppm Long term value: 220 mg/m³, 50ppm Sk; BMGV
123-42-2 4-hydroxy-4-methylpentan-2-one WEL	Short term value 362mg/ m³, :75ppm Long term value: 241 mg/ m³,:50ppm
108-88-3 toluene WEL	Short term value: 384 mg/m³, 100ppm Long term value: 191 mg/m³, 50ppm SK
67-63-0 propan-2-ol WEL	Short term value: 1250 mg/m³, 500ppm Long term value: 999mg/m³,400ppm
100-41-4 ethylbenzene WEL	Short term value: 552 mg/m³,125ppm Long term value 441mg/m³,100ppm SK
78-83-1 isobutanol WEL	Short term value: 231mg/m³,75ppm Long term value: 154mg/m³,50ppm

8.1.2 Ingredients with biological limit values

1130-20-7 Xylene (mix)

650 mmol/mol creatinine Medium Urine Sampling time: post Shift Parameter: methyl hippuric acid

Additional information: the list valid during the making were used as a basis.

8.2 Exposure Controls Personal protective equipment

Keep away from food stuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work Avoid contact with the skin Avoid contact with the eyes and skin

When spraying the product, use a respiratory protective device



The glove material has to be impermeable and resistant to the product/ substance the preparation Selection of the glove material on consideration of the penetration times

rates of diffusion and the degradation

The selection of suitable gloves does not only depend on the material but also n the further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time has to be found out by the manufacturer of the protective glove and has to be observed



Tightly sealed goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

	General Information	
Form	Liquid	
Colour	Black	
Odour	Characteristic	
Odour Threshold	Not determined	
pH Value	Not determined	
	Change in condition	
Melting point/Melting range	Undetermined	
Boiling point/Boiling point range	82°C	
Flash point	4°C	
Flammability (solid gaseous)	Not applicable	
Ignition temperature	425°C	
Decomposition temperature	Not determined	
Self-igniting	Product is not self igniting	
Danger of Explosion	Product is not explosive, however, formation of explosive air/vapour mixtures are possible	
Explosion limits		
Lower	1.2 Vol %	
Higher	12 Vol %	
Vapour Pressure at 20 ºC	43 hPa	
Density at 20 ºC	0.88 g/cm³	
Relative density	Not determined	
Vapour density	Not determined	
Vapour density Evaporation rate	Not determined Not applicable	
Evaporation rate	Not applicable	
Evaporation rate Solubility in/Miscibility with water	Not applicable NOT MISCIBLE	
Evaporation rate Solubility in/Miscibility with water Partition coefficient (n-octanol/water)	Not applicable NOT MISCIBLE Not determined	
Evaporation rate Solubility in/Miscibility with water Partition coefficient (n-octanol/water) Viscosity: Dynamic	Not applicable NOT MISCIBLE Not determined 100mPas	
Evaporation rate Solubility in/Miscibility with water Partition coefficient (n-octanol/water) Viscosity: Dynamic	Not applicable NOT MISCIBLE Not determined 100mPas Not determined	

9.2 Other Information

No further information available

10. STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical Stability

Thermal decomposition/ conditions to be avoided: No decomposition if used according to the specification.

10.3 Possibility of Hazardous reactions

No dangerous reactions known

10.4 Conditions to be avoided

No further relevant information available

10.5 Incompatible materials

No further relevant information available

10.6 Hazardous Decomposition Products

No dangerous decomposition products known

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:		
108-88-3 toluene		
Oral	LD50	5000mg/kg (rat)
Dermal	LD50	12124mg/kg (rab)
Inhalative	LD50/4h	5320mg/l (mus)

Primary irritant effect

On the skin: irritant to the skin and mucous membranes

On the eye: Irritating effect

Sensitization: No sensitizing effects known

Additional toxicological information

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparation as issued in the latest version:

Harmful Irritant

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity

No further relevant information available

12.2 Persistence and degradability

No further relevant information available

12.3 Bioaccumulative potential

No further relevant information available

12.4 Mobility in soil

No further relevant information

Additional ecological information

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system.

12.5 results of PBT and vPvB assessment

PBT: not applicable **vPvB:** not applicable

12.6 Other adverse effects

No further relevant information available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

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

Uncleaned packaging

Recommendation

Disposal must be made according to the official regulations

14. TRANSPORT INFORMATION

14.1 UN Number

ADR, IMDG,IATA UN1263

14.2 UN Proper Shipping Name

ADR	1263 Paint (vapour pressure at 50C not more than 110kPA)
IMDG	
IATA	PAINT

14.3 Transport Hazard Class

ADR,IMDG,IATA	€ Flammable
Class	3 Flammable liquids
Label	3

14.4 Packing group

ADR,IMDG, IATA

14.5 Environmental hazards

Marine pollutant No

14.6 special precautions for user

Warning	Flammable liquids
No further relevant information available	33
FMS Number	F-F.S-F

14.7 Transport Information

Transport in bulk according to Annex II	Not applicable
Of MARPOL73/78 and the IBC Code	
ADR	
Limited Quantities (LQ)	5L
Excepted quantities	Code: E2 Maximum net quantity per inner packaging: 30ml Maximum net quantity per inner packaging :500 ml
Transport category	2
Tunnel restriction code	D/E
IMDG	
Limited Quantities (LQ)	1L
Excepted quantities	Code: E2 Maximum net quantity per inner packaging: 30ml Maximum net quantity per inner packaging :500 ml

15. REGULATORY INFORMATION

15.1 Safety, health and environment regulations/legislation specific for the substance or mixture National regulations

Technical instructions(air)

Class	Share in %
NK	66.0

Water hazard class

Water hazard class 2 (self assessment): hazardous for water.

15.2 chemical safety assessment

A chemical safety assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Other Information

Relevant phrases

R10	Flammable
R11	Highly flammable
	Harmful by inhalation
R20/21	Harmful by inhalation and in contact with skin
	Irritating to eyes
R37/38	Irritating to eyes
	Irritating skin
R38	Risk of serious damage to eyes
	Harmful: danger of serious damage to health by
R63	Prolonged exposure through inhalation.
R65	Possible risk of harm to the unborn child
R67	Harmful may cause lung damage if swallowed Vapours may cause drowsiness and dizziness
H225	Highly flammable liquid vapour
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

Department issuing MSDS:

Product safety department: LABORATORY

Abbreviations and acronyms:

Contact: health and safety

Further Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its acc<mark>urac</mark>y. This information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.