

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

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

1.1 Product identifier

Product name : SUNHYTEK GP XD BLACK

Product code : SHTN90
Trade name : SUNHYTEK

Index number :

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

Identified uses			
Printing ink. Printing ink related material			
Uses advised against Reason			
Not applicable.			

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Distributor : SUN CHEMICAL

NORTON HILL

MIDSOMER NORTON

BATH

SOMERSET BA3 4RT

UNITED KINGDOM (44) 1689 894000 SUN CHEMICAL LTD TAYLOR ROAD TRAFFORD PARK MANCHESTER

M41 7SW 0845 677 4401

e-mail address of person responsible for this SDS

: regulatory.affairs@sunchemical.com

1.4 Emergency telephone number

Supplier

Telephone number

(44) 161 746 7840 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Date of issue : 30 November, 2012 Page: 1/13

SECTION 2: Hazards identification

Classification : R10

Carc. Cat. 3; R40 Xn; R20/21/22 Xi; R36/37 R52/53

Physical/chemical

hazards

: Flammable.

Human health hazards: Limited evidence of a carcinogenic effect. Harmful by inhalation, in contact with skin

and if swallowed. Irritating to eyes and respiratory system.

Environmental hazards: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

See Section 16 for the full text of the R-phrases declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard symbol or symbols

×

Indication of danger : Harmful

Risk phrases: R10- Flammable.

R40- Limited evidence of a carcinogenic effect.

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R36/37- Irritating to eyes and respiratory system.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Safety phrases: S36/37- Wear suitable protective clothing and gloves.

Hazardous ingredients : 3,5,5-trimethylcyclohex-2-enone

Supplemental label

elements

: Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number

average molecular weight ≤ 700). May produce an allergic reaction.

2.3 Other hazards

Other hazards which do not result in classification

: Not available.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

			Classification		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Solvent naphtha (petroleum), heavy aromatic	REACH #: 01- 2119463583-34 EC: 265-198-5 CAS: 64742-94-5 Index: 649-424-00-3	10 - 25	Xn; R65 R66, R67 N; R51/53	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
3,5,5- trimethylcyclohex-2- enone	EC: 201-126-0 CAS: 78-59-1 Index: 606-012-00-8	5 - 10	Carc. Cat. 3; R40 Xn; R21/22 Xi; R36/37	Acute Tox. 4, H302 Acute Tox. 4, H312 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335	[1] [2]
aromatiske carbonhydrider, C9	CAS: 128601-23-0	5 - 10	R10 Xn; R65	Flam. Liq. 3, H226 STOT SE 3, H335 and H336i	[1]

Date of issue : 30 November, 2012 Page: 2/13

SECTION 3: Composition/information on ingredients

	<u> </u>				
			Xi; R37 R66, R67 N; R51/53	Asp. Tox. 1, H304 Aquatic Chronic 2, H411	
2-butoxyethanol	REACH #: 01- 2119475108-36	5 - 10	Xn; R20/21/22	Acute Tox. 4, H302	[1] [2]
	EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0		Xi; R36/38	Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	
γ-butyrolactone	EC: 202-509-5 CAS: 96-48-0	5 - 10	Xn; R22 Xi; R41 R67	Acute Tox. 4, H302 Eye Dam. 1, H318 STOT SE 3, H336	[1]
2-methoxy-1- methylethyl acetate	REACH #: 01- 2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	2.5 - 5	R10	Flam. Liq. 3, H226 Eye Irrit. 2, H319	[2]
2-isopropoxyethanol	EC: 203-685-6 CAS: 109-59-1 Index: 603-013-00-5	2.5 - 5	Xn; R20/21 Xi; R36	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
cyclohexanone	EC: 203-631-1 CAS: 108-94-1 Index: 606-010-00-7	1 - 2.5	R10 Xn; R20	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332	[1] [2]
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	< 1	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
			See Section 16 for the full text of the R- phrases declared above.	See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General	: In all cases of doubt, or when symptoms persist, seek medical attention. Never give
	anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with room

temperature water for at least 15 minutes, keeping eyelids open. In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV

light which may increase the sensitivity of the eyes.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

Date of issue : 30 November, 2012 Page: 3/13

SECTION 4: First aid measures

Ingestion

: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700). May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to medical doctor

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments

: No specific treatment.

SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture

5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

Hazards from the substance or mixture

: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters

: Appropriate breathing apparatus may be required.

Date of issue : 30 November, 2012 Page: 4/13

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent. Avoid using solvents.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

: Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

7.2 Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 5 - 35 °C

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully

resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations Industrial sector specific solutions

Not available. . Not available.

Date of issue : 30 November, 2012 Page: 5/13

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
3,5,5-trimethylcyclohex-2-enone	EH40/2005 WELs (United Kingdom (UK), 1/2012). STEL: 29 mg/m³ 15 minute(s). STEL: 5 ppm 15 minute(s).
2-butoxyethanol	EH40/2005 WELs (United Kingdom (UK), 1/2012). Absorbed through skin. STEL: 50 ppm 15 minute(s). TWA: 25 ppm 8 hour(s).
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2012). Absorbed through skin. STEL: 548 mg/m³ 15 minute(s). STEL: 100 ppm 15 minute(s). TWA: 274 mg/m³ 8 hour(s). TWA: 50 ppm 8 hour(s).
cyclohexanone	EH40/2005 WELs (United Kingdom (UK), 1/2012). Absorbed through skin. STEL: 20 ppm 15 minute(s). TWA: 10 ppm 8 hour(s).

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2 Exposure controls

Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection

Hand protection

Gloves

: Use safety eyewear designed to protect against splash of liquids.

: Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates

this is necessary.

: Personnel should wear antistatic clothing made of natural fibers or of high-**Body protection** temperature-resistant synthetic fibers.

> : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Environmental exposure controls

Respiratory protection

: Do not allow to enter drains or watercourses.

Date of issue : 30 November, 2012 Page: 6/13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

: Liquid. Physical state : Black. Color

: Characteristic. Odor : Not applicable. Odor threshold : Not applicable. Melting point/freezing point

: 44°C Flash point VOC : 39% рΗ : Not tested Lower explosion limit : Lower: 0.8% Upper: 16%

Boiling point : Lowest known value: 140°C (284°F)

: Highest known value: 0.3 (cyclohexanone) Weighted average: 0.05compared **Evaporation rate**

with butyl acetate

Upper/lower flammability or

explosive limits

: Not tested

Vapor pressure : Not tested : Not tested Vapor density Relative density : Not available. Solubility(ies) : Not tested Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature : Not applicable. **Decomposition temperature** : Not applicable. **Viscosity** : Not tested **Explosive properties** : Not applicable. Oxidizing properties : Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability : Stable under recommended storage and handling conditions (see section 7).

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Date of issue : 30 November, 2012 Page: 7/13

SECTION 11: Toxicological information

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700). May produce an allergic reaction.

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name Solvent naphtha	Result LC50 Inhalation Vapor	Species Rat	Dose >590 mg/m3	Exposure 4 hours
(petroleum), heavy aromatic 3,5,5-trimethylcyclohex-2-enone		Rat	1390 mg/kg	-
CHOILE	LD50 Oral	Rat	1870 mg/kg	_
2-butoxyethanol	LD50 Oral	Rat	917 mg/kg	_
γ-butyrolactone	LC50 Inhalation Vapor	Rat	>5100 mg/m3	4 hours
	LD50 Oral	Rat	1540 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	_
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
•	LD50 Oral	Rat	1800 mg/kg	_

Irritation/Corrosion

Not determined - Classification according to Directive 1999/45/EC [DPD]

Sensitization

Not determined - Classification according to Directive 1999/45/EC [DPD]

Mutagenicity

Not applicable.

Carcinogenicity

Not applicable.

Reproductive toxicity

Not determined - Classification according to Directive 1999/45/EC [DPD]

Teratogenicity

Not applicable.

Date of issue : 30 November, 2012 Page: 8/13

SECTION 12: Ecological information

There are no data available on the preparation itself.

Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 3 and 15 for details.

12.1 Toxicity

3,5,5-trimethylcyclohex-2-enone	Acute LC50 120000 to 170000 ug/L Fresh water	Daphnia - Daphnia magna - <=24 hours	48 hours
	Acute LC50 140 mg/L Marine water	Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - <20 days	96 hours
	Chronic NOEC 15000 ug/L Fresh water	Daphnia - Daphnia magna - <=24 hours	48 hours
	Chronic NOEC 170 ppm Marine water	Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	96 hours
2-butoxyethanol	Acute LC50 1250000 ug/L Marine water	Fish - Menidia beryllina - 40 to 100 mm	96 hours
	Chronic NOEC 1000 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
cyclohexanone	Acute LC50 527000 to 578000 ug/L Fresh water	Fish - Pimephales promelas - 30 days - 20.2 mm - 0.127 g	96 hours

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
3,5,5-trimethylcyclohex-2- enone	1.7	-	low
2-butoxyethanol γ-butyrolactone	0.83 -0.64	- -	low low
2-methoxy-1-methylethyl acetate	0.56	-	low
2-isopropoxyethanol cyclohexanone	0.05 0.81	-	low low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable. vPvB : Not applicable.

12.6 Other adverse effects: No known significant effects or critical hazards.

Date of issue : 30 November, 2012 Page: 9/13

SECTION 13: Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Packaging

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

European Waste Catalogue: 08 03 12

(EWC):

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	UN1210	UN1210	UN1210	UN1210
14.2 UN proper shipping name	PRINTING INK	PRINTING INK	PRINTING INK	PRINTING INK
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Special provisions 640 (E) Tunnel code	-	-	-
	(D/E)			

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Date of issue : 30 November, 2012 Page: 10/13

SECTION 14: Transport information

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

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

articles

Other EU regulations

Product/ingredient name	Carcinogenic effects		Developmental effects	Fertility effects
3,5,5-trimethylcyclohex-2- enone	Carc. Cat. 3; R40	-	-	-

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

15.2 Chemical Safety Assessment

: This product contains substances for which Chemical Safety Assessments are still to be received.

SECTION 16: Other information

CEPE code

Indicates information that has changed from previously issued version.

Abbreviations and

acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

Full text of abbreviated H

statements

: H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

Causes skin irritation. H315

May cause an allergic skin reaction. H317 Causes serious eye damage. H318 H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H335 May cause respiratory irritation. May cause drowsiness and dizziness.

: 30 November, 2012 Date of issue Page: 11/13

SECTION 16: Other information

and H336i

H336 May cause drowsiness and dizziness.

Suspected of causing cancer. H351

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

: Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4 Acute Tox. 4, H312 ACUTE TOXICITY: SKIN - Category 4

Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4 Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2 Aquatic Chronic 3, H412 AQUATIC TOXICITY (CHRONIC) - Category 3

ASPIRATION HAZARD - Category 1 Asp. Tox. 1, H304 Carc. 2, H351 CARCINOGENICITY - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 Eye Dam. 1, H318 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3

Skin Irrit, 2, H315 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1

STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE

EXPOSURE) [Respiratory tract irritation] - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE

STOT SE 3, H335 and H336i EXPOSURE): INHALATION [Respiratory tract irritation

and Narcotic effects] - Category 3

STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE

EXPOSURE) [Narcotic effects] - Category 3

Full text of abbreviated R phrases

: R10- Flammable.

R40- Limited evidence of a carcinogenic effect.

R20- Harmful by inhalation. R22- Harmful if swallowed.

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

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R21/22- Harmful in contact with skin and if swallowed. R65- Harmful: may cause lung damage if swallowed.

R41- Risk of serious damage to eyes.

R36- Irritating to eyes.

R37- Irritating to respiratory system.

R36/37- Irritating to eyes and respiratory system.

R36/38- Irritating to eyes and skin.

R43- May cause sensitization by skin contact.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapors may cause drowsiness and dizziness.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD]

: Carc. Cat. 3 - Carcinogen category 3

Xn - Harmful Xi - Irritant

N - Dangerous for the environment

Date of printing Date of issue/ Date of revision

: 12/6/2012. : 11/30/2012.

Date of previous issue

: No previous validation.

: 0.01 Version

Notice to reader

Date of issue : 30 November, 2012 Page: 12/13

SHTN90

SECTION 16: Other information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Annex

Date of issue : 30 November, 2012 Page: 13/13