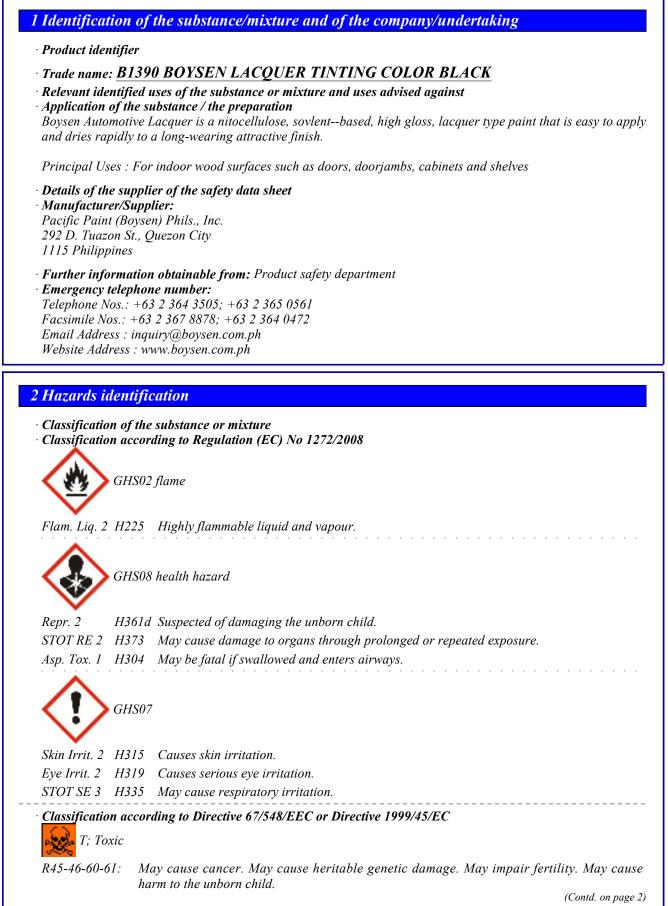


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(Contd. of page 1) Xn; Harmful Harmful: danger of serious damage to health by prolonged exposure through inhalation. *R48/20-63-65*: Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. F; Highly flammable R11: Highly flammable. R67: Vapours may cause drowsiness and dizziness. · Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data. · Label elements · Labelling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials. · Code letter and hazard designation of product: T Toxic F Highly flammable · Hazard-determining components of labelling: toluene Solvent naphtha (petroleum), light aliph. 2-ethoxyethanol · Risk phrases: May cause cancer. 45 May cause heritable genetic damage. 46 *May impair fertility.* 60 May cause harm to the unborn child. 61 Highly flammable. 11 48/20 Also harmful: danger of serious damage to health by prolonged exposure through inhalation. 63 Possible risk of harm to the unborn child. 65 Harmful: may cause lung damage if swallowed. 67 Vapours may cause drowsiness and dizziness. · Safety phrases: 53 Avoid exposure - obtain special instructions before use. 1/2 Keep locked up and out of the reach of children. 7/9 Keep container tightly closed and in a well-ventilated place. 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. *36/37/39 Wear suitable protective clothing, gloves and eye/face protection.* In case of accident or if you feel unwell, seek medical advice immediately (show the label where 45 possible). (Contd. on page 3) PH

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• Other hazards

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

CAS: 123-86-4	<i>n-butyl acetate</i>	10-25%
EINECS: 204-658-1		
	🚸 Flam. Liq. 3, H226; 🚸 STOT SE 3, H336	
CAS: 67-63-0	propan-2-ol	10-25%
EINECS: 200-661-7	Xi R36; 🙀 F R11 R67	
	🚸 Flam. Liq. 2, H225; 🚸 Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 108-88-3	toluene	2.5-10%
EINECS: 203-625-9	¥ Xn R48/20-63-65; ¥ Xi R38; ₿ F R11 R67	
	Repr. Cat. 3	
CAS: 110-80-5	2-ethoxyethanol	2.5-10%
EINECS: 203-804-1	T Repr. Cat. 2 R60-61; Xn R20/21/22 R10	
	🚸 Flam. Liq. 3, H226; 🚸 Repr. 1B, H360FD; 🚸 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	
CAS: 67-64-1	acetone	2.5-10%
EINECS: 200-662-2	Xi R36; 🔥 F R11 R66-67	
	🚸 Flam. Liq. 2, H225; 🚸 Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 1330-20-7	xylene	≤ 2.5%
EINECS: 215-535-7	Xn R20/21; Xi R38 R10	
	Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	
CAS: 64742-89-8	Solvent naphtha (petroleum), light aliph.	≤ 2.5%
EINECS: 265-192-2	🙀 T Carc. Cat. 2, Muta. Cat. 2 R45-46; 💥 Xn R65	
	🚷 Carc. 1B, H350; Asp. Tox. 1, H304	

4 First aid measures

• Description of first aid measures

• General information:

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

· After inhalation: Supply fresh air; consult doctor in case of complaints.

• After skin contact: Immediately wash with water and soap and rinse thoroughly.

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- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 *Firefighting measures*

- · Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- *Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.*
- Environmental precautions:
- Do not allow product to reach sewage system or any water course.
- Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/ surface or ground water.
- 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.
- Do not flush with water or aqueous cleansing agents
- 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling
- *Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.*
- Prevent formation of aerosols.
- *Information about fire and explosion protection: Keep ignition sources away - Do not smoke.*
- Protect against electrostatic charges.
- Keep respiratory protective device available.
- · 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: Not required.
- Further information about storage conditions:
- Keep container tightly sealed.

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Store in cool, dry conditions in well sealed receptacles.

• 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.

0	with limit values that require monitoring at the workplace:	
123-86-4 n-l	butyl acetate	
PEL (USA)	710 mg/m ³ , 150 ppm	
REL (USA)	Short-term value: 950 mg/m ³ , 200 ppm	
	Long-term value: 710 mg/m³, 150 ppm	
TLV (USA)	Short-term value: 950 mg/m ³ , 200 ppm	
	Long-term value: 713 mg/m ³ , 150 ppm	
67-63-0 prop	ban-2-ol	
PEL (USA)	980 mg/m ³ , 400 ppm	
REL (USÁ)	Short-term value: 1225 mg/m ³ , 500 ppm	
	Long-term value: 980 mg/m ³ , 400 ppm	
TLV (USA)	Short-term value: 984 mg/m ³ , 400 ppm	
	Long-term value: 492 mg/m ³ , 200 ppm	
	BEI	
108-88-3 tol	uene	
PEL (USA)	Short-term value: C 300; 500* ppm	
	Long-term value: 200 ppm	
	*10-min peak per 8-hr shift	
REL (USA)	Short-term value: 560 mg/m ³ , 150 ppm	
	Long-term value: 375 mg/m ³ , 100 ppm	
TLV (USA)	75 mg/m ³ , 20 ppm	
110-80-5 2-6	thoxyethanol	
PEL (USA)	740 mg/m ³ , 200 ppm	
	Skin	
REL (USA)	1.8 mg/m ³ , 0.5 ppm	
	Skin	
TLV (USA)	18 mg/m ³ , 5 ppm	
	Skin; BEI	
67-64-1 acei	one	
PEL (USA)	2400 mg/m ³ , 1000 ppm	
REL (USÁ)	590 mg/m ³ , 250 ppm	
TLV (USA)	Short-term value: 1782 mg/m ³ , 750 ppm	
	Long-term value: 1188 mg/m ³ , 500 ppm	
	BEI	
IOELV (EU)	1210 mg/m ³ , 500 ppm	

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1330-20-7 xylene		
PEL (USA)	435 mg/m ³ , 100 ppm	
REL (USA)	Short-term value: 655 mg/m ³ , 150 ppm	
	Long-term value: 435 mg/m ³ , 100 ppm	
TLV (USA)	Short-term value: 651 mg/m ³ , 150 ppm	
	Long-term value: 434 mg/m ³ , 100 ppm	
	BEI	
IOELV (EU)	Short-term value: 442 mg/m ³ , 100 ppm	
	Long-term value: 221 mg/m ³ , 50 ppm	
	Skin	
· Additional in	formation: The lists valid during the making were used as basis.	

· Exposure controls

· Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Store protective clothing separately.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation *Material of gloves*

The selection of the suitable gloves does not only depend on the material, but also on 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.

Penetration time of glove material

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

• Eye protection:



Tightly sealed goggles

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Information on basic physic	al and chemical properties
General Information	
Appearance:	
Form: Colour:	Fluid
· Odour:	According to product specification Characteristic
Change in condition	
Melting point/Melting rang	
Boiling point/Boiling range	e: 55°C
Flash point:	-19°C
Ignition temperature:	235°C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixture are possible.
Explosion limits:	
Lower:	1.2 Vol %
Upper:	12.0 Vol %
Vapour pressure at 20°C:	43 hPa
Density:	1.00 - 1.20 Kg/L
Solubility in / Miscibility with	h
water:	Not miscible or difficult to mix.
Solvent content:	
Organic solvents:	56.3 %
VOC (EC)	690 g/L
Solids content:	43.7 %
Other information	No further relevant information available.

10 Stability and reactivity

· Reactivity

· Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known.

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

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• Acute toxi	city:	vological effects
LD/LC50 108-88-3 t		vant for classification:
Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)
110-80-5 2	2-ethoxyeth	nanol
Oral	LD50	3000 mg/kg (rat)
Dermal	LD50	3300 mg/kg (rabbit)
Inhalative	LC50/4 h	2000 mg/l (rat)
• on the eye • Sensitizati	n: Cause m : No irritat on: No sen	ild irritation

Carcinogenic.

The product can cause inheritable damage.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · *Mobility in soil* No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

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

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• Uncleaned packaging:

• *Recommendation:* Disposal must be made according to official regulations.

UN-Number	
ADR, IMDG, IATA	1993
UN proper shipping name	
ADR	1993 FLAMMABLE LIQUID, N.O.S. (ACETONE, TOLUENE special provision 640D
IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (ACETONE, TOLUENE)
Transport hazard class(es)	
ADR	
Class	3 (F1) Flammable liquids.
Label	3
IMDG, IATA	
Class	3 Flammable liquids.
Label	3
Packing group ADR, IMDG, IATA	II
Environmental hazards:	11
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler): EMS Number:	33 F-E,S-E
Transport in bulk according to Annex I	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Tunnel restriction code	D/E

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15 Regulatory information

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

· Philippines Inventory of Chemicals and Chemical Substances

All ingredients are listed.

· 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.

· Relevant phrases

• Relevant p	phrases		
H225	Highly flammable liquid and vapour.		
H226	Flammable liquid and vapour.		
H302	Harmful if swallowed.		
H304	May be fatal if swallowed and enters airways.		
H312	Harmful in contact with skin.		
H315	Causes skin irritation.		
H319	Causes serious eye irritation.		
H332	Harmful if inhaled.		
H336	May cause drowsiness or dizziness.		
H350	May cause cancer.		
H360FD	May damage fertility. May damage the unborn child.		
H361d	Suspected of damaging the unborn child.		
H373	May cause damage to organs through prolonged or repeated exposure.		
R10			
RII	Flammable.		
R11 R20/21	Highly flammable.		
	Harmful by inhalation and in contact with skin.		
	P Harmful by inhalation, in contact with skin and if swallowed.		
R36	Irritating to eyes.		
R38	Irritating to skin.		
R45	May cause cancer.		
R46	May cause heritable genetic damage.		
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.		
R60	May impair fertility.		
R61	May cause harm to the unborn child.		
R63	Possible risk of harm to the unborn child.		
R65	Harmful: may cause lung damage if swallowed.		
R66	Repeated exposure may cause skin dryness or cracking.		
R67	Vapours may cause drowsiness and dizziness.		
· Departme	nt issuing MSDS:		
	alth and Environment Department		
	A. Fontejon - g fontejon@boysen.com.ph		
	ions and acronyms:		
	d européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International		
Carriage of	Dangerous Goods by Road)		
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the			
	l Transport of Dangerous Goods by Rail) national Maritime Code for Dangerous Goods		
	ational Air Transport Association		
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)			
	national Civil Aviation Organization		
ICAO-11: Te	chnical Instructions by the "International Civil Aviation Organization" (ICAO) (Contd. on page 11)		
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GHS: Globally Harmonized System of Classification and Labelling of Chemicals VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent • * Data compared to the previous version altered.

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