1 Identification

- · Product identifier
- · Trade name: 39023 39583 TPO-Direct Bumper Coaters
- · Article number:

39153, 39253, 39263, 39273, 39163, 39173, 39183, 39193, 39283, 39293, 39413, 39423, 39443, 39583, 39023, 39073, 39083, 39103

- · Application of the substance / the mixture Coating
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SEM Products Inc. 1685 Overview Drive Rock Hill, SC 29730 803 207 8225

· Information department:

cust_care@semproducts.com: SEM Products,Inc. 1685 Overview Dr. Rock Hill, SC 29730: phone 1-800-831-1122, M - TH 7am - 4pm EDT

· Emergency telephone number: CHEMTREC 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture





GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS04 Gas cylinder

Press. Gas H280 Contains gas under pressure; may explode if heated.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways. Asp. Tox. 1



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). (Contd. on page 2)



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 1)

· Hazard pictograms









GHS04

GHS07

· Signal word Danger

· Hazard-determining components of labeling:

toluene

cyclohexane

2,6-dimethylheptan-4-one

Carbon black

· Hazard statements

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H315 Causes skin irritation.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P211 Do not spray on an open flame or other ignition source.

P280 Wear protective gloves.

P264 Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area. P271

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 3)

Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 2)

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1Fire = 4Reactivity = 3

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture: consisting of the following components.

Weight percentages

· Dangerous components:			
115-10-6	dimethyl ether	40 - 60%	
108-88-3	toluene	13 - 30%	
110-19-0	110-19-0 isobutyl acetate		
	cyclohexane	1.5 - 5%	
108-83-8	2,6-dimethylheptan-4-one	1-1.5%	
	NJ TSRN: 8009285004 Polyester Plasticizer	1-1.5%	
1333-86-4	Carbon black	≤1%	
13463-67-7	titanium dioxide	≤1%	

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · 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.



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 3)

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

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

· Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 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

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about protection against explosions and fires:

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurized containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 5)



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 4)

•	Control	parameters
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	ol parameters			
	onents with limit values that require monitoring at the workplace:			
	0-6 dimethyl ether			
WEEL	Long-term value: 1000 ppm			
108-88-3 toluene				
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift			
REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm			
TLV	Long-term value: 75 mg/m³, 20 ppm BEI			
110-1	9-0 isobutyl acetate			
PEL	Long-term value: 700 mg/m³, 150 ppm			
REL	Long-term value: 700 mg/m³, 150 ppm			
TLV	Short-term value: NIC-712 mg/m³, NIC-150 ppm Long-term value: (713) NIC-238 mg/m³, (150) NIC-50 ppm			
110-82	2-7 cyclohexane			
PEL	Long-term value: 1050 mg/m³, 300 ppm			
REL	Long-term value: 1050 mg/m³, 300 ppm			
TLV	Long-term value: 344 mg/m³, 100 ppm			
108-8.	3-8 2,6-dimethylheptan-4-one			
PEL	Long-term value: 290 mg/m³, 50 ppm			
REL	Long-term value: 150 mg/m³, 25 ppm			
TLV	Long-term value: 145 mg/m³, 25 ppm			
Ingred	lients with biological limit values:			
108-8	8-3 toluene			
BEI 0.02 mg/L				

Medium: blood

Time: prior to last shift of workweek

Parameter: Toluene

0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene

0.3 mg/g creatinine Medium: urine Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

(Contd. on page 6)



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 5)

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

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



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Aerosol

Color: According to product specification

Odor: Characteristic
 Odor threshold: Not determined.
 pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: -24 °C

· Flash point: -42 °C

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: 235 °C

(Contd. on page 7)

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Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

	(Contd. of page
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
Explosion limits:	
Lower:	1.2 Vol %
Upper:	18.6 Vol %
Vapor pressure at 20 °C:	5200 hPa
Density at 20 °C:	0.78383 g/cm^3
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wa	tter): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	89.8 %
VOC content:	89.8 %
	704.1 g/l / 5.88 lb/gl
Solids content:	9.6 %
Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · 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.
- $\cdot \textbf{Incompatible materials:} \ No \ further \ relevant \ information \ available.$
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:			
108-88-3 toluene			
Oral	LD50	5000 mg/kg (rat)	
Dermal	LD50	12124 mg/kg (rabbit)	

(Contd. on page 8)



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

| Contd. of page 7)
| Inhalative | LC50/4 h | 5320 mg/l (mouse)
| 110-82-7 cyclohexane | Coral | LD50 | 12705 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

108-88-3	toluene	3
1333-86-4	Carbon black	21
13463-67-7	titanium dioxide	21
1330-20-7	xylene	3
67-63-0	propan-2-ol	3
100-41-4	ethylbenzene	21
7631-86-9	silicon dioxide, chemically prepared	3
14807-96-6	Talc	21
NTP (Natio	nal Toxicology Program)	

· OSHA-Ca (Occupational Safety & Health Administration)

68911-87-5 ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior 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 (Self-assessment): extremely hazardous for water

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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.

ta Sheet HA HCS

Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 8)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number	
DOT, ADR, IMDG, IATA	UN1950
UN proper shipping name	
DOT, IATA	Aerosols, flammable
ADR	1950 Aerosols
IMDG	AEROSOLS
Transport hazard class(es)	
DOT	
R AMMARI F GAS	
2	
Class	2.1
Label	2.1
ADR	
Class	2 5F Gases
Label	2.1
IMDG, IATA	
2	
Class	2.1
Label	2.1
Packing group	
DOT, ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Gases

- HSA

Safety Data Sheet acc. to OSHA HCS

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Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

	(Contd. of page
EMS Number:	F- D , S - U
Stowage Code	SWI Protected from sources of heat.
	SW22 For AEROSOLS with a maximum capacity of 1 litr
	Category A. For AEROSOLS with a capacity above 1 litr
	Category B. For WASTE AEROSOLS: Category C, Clear of livi
	quarters.
Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litr
	Segregation as for class 9. Stow "separated from" class 1 except j
	division 1.4. For AEROSOLS with a capacity above 1 litr
	Segregation as for the appropriate subdivision of class 2. F
	WASTE AEROSOLS: Segregation as for the appropriate subdivisi
	of class 2.
Transport in bulk according to Anne.	ex II of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
DOT Quantity limitations	On passenger aircraft/rail: 75 kg
	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg
Quantity limitations	
Quantity limitations ADR	On cargo aircraft only: 150 kg
Quantity limitations ADR	On cargo aircraft only: 150 kg Code: E0
Quantity limitations ADR Excepted quantities (EQ) IMDG	On cargo aircraft only: 150 kg Code: E0
Quantity limitations ADR Excepted quantities (EQ)	On cargo aircraft only: 150 kg Code: E0 Not permitted as Excepted Quantity
Quantity limitations ADR Excepted quantities (EQ) IMDG Limited quantities (LQ)	On cargo aircraft only: 150 kg Code: E0 Not permitted as Excepted Quantity 1L

15 Regulatory information

- $\cdot \textit{Safety, health and environmental regulations/legislation specific for the substance or \textit{mixture}}$
- · Sara

Sur u					
· Section 355	· Section 355 (extremely hazardous substances):				
None of the	None of the ingredient is listed.				
· Section 313	· Section 313 (Specific toxic chemical listings):				
108-88-3 toluene					
110-82-7	cyclohexane				
7429-90-5	aluminium				
	ACRYLIC RESIN				
1330-20-7	xylene				
78-93-3	butanone				
67-63-0	propan-2-ol				
100-41-4	ethylbenzene				
67-56-1	methanol				
14807-96-6	Talc				

(Contd. on page 11)

Safety Data Sheet acc. to OSHA HCS



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 10) · TSCA (Toxic Substances Control Act): 115-10-6 dimethyl ether 108-88-3 toluene 110-19-0 isobutyl acetate 110-82-7 cyclohexane 108-83-8 2,6-dimethylheptan-4-one 1333-86-4 Carbon black 7429-90-5 aluminium 19549-80-5 4,6-dimethylheptan-2-one 64742-88-7 Solvent naphtha (petroleum), medium aliph. 13463-67-7 titanium dioxide 51274-00-1 YELLOW IRON OXIDE 1330-20-7 xylene 78-93-3 butanone 67-63-0 propan-2-ol 1332-37-2 Iron oxide · Proposition 65 · Chemicals known to cause cancer: 1333-86-4 Carbon black 13463-67-7 titanium dioxide 1330-20-7 xylene 100-41-4 ethylbenzene 25068-38-6 bisphenolA(chloro)oxirane polymer · Chemicals known to cause reproductive toxicity for females: 108-88-3 toluene · Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. · Chemicals known to cause developmental toxicity: 108-88-3 toluene 67-56-1 methanol · Cancerogenity categories · EPA (Environmental Protection Agency) 108-88-3 toluene II110-82-7 cyclohexane 1330-20-7 xylene 78-93-3 butanone Ι 100-41-4 ethylbenzene D· TLV (Threshold Limit Value established by ACGIH) 108-88-3 toluene A41333-86-4 Carbon black *A4* 7429-90-5 aluminium *A4* 13463-67-7 titanium dioxide A4(Contd. on page 12)



Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

		d. of page 11)
1330-20-7	xylene	A4
	propan-2-ol	A4
100-41-4	ethylbenzene	A3
14807-96-6	Talc	A4
· NIOSH-Ca	(National Institute for Occupational Safety and Health)	
1333-86-4	Carbon black	
13463-67-7	titanium dioxide	
67-56-1	methanol	

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms









GHS04 GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

toluene

cyclohexane

2,6-dimethylheptan-4-one

Carbon black

- · Hazard statements
- H222 Extremely flammable aerosol.
- H280 Contains gas under pressure; may explode if heated.
- H315 Causes skin irritation.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H304 May be fatal if swallowed and enters airways.
- · Precautionary statements
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P251 Do not pierce or burn, even after use.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P211 Do not spray on an open flame or other ignition source.
- P280 Wear protective gloves.
- P264 Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area. P271
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see on this label).
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P331 Do NOT induce vomiting.
- P302+P352 IF ON SKIN: Wash with plenty of water.

(Contd. on page 13)

Safety Data Sheet acc. to OSHA HCS



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Trade name: 39023 - 39583 TPO-Direct Bumper Coaters

(Contd. of page 12)

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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.

- · Department issuing SDS: Environment protection department.
- · Contact: Steve Gaver (sgaver@semproducts.com)
- · Date of preparation / last revision 02/22/2016 / 8
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

 $TLV:\ Threshold\ Limit\ Value$

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

* Data compared to the previous version altered.

USA