Printing date 10/07/2014

Reviewed on 10/07/2014

1 Identification

- · Product identifier
- · Trade name: <u>Power-Sol</u>
- · Article number: C-16
- · Application of the substance / the mixture Cleaner solvent

Details of the supplier of the safety data sheet
Manufacturer/Supplier: BAF Industries
8010 Dixie Highway
Florence, KY 41042
USA
phone: 859-372-5900

· Information department: msds_info@prowax.com

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Carc. 2

R37:

H351 Suspected of causing cancer.



STOT SE 3 H335 May cause respiratory irritation.

<u>Classification according to Directive 67/548/EEC or Directive 1999/45/EC</u>

Xi; Irritant

Irritating to respiratory system.

N; Dangerous for the environment

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

R10: Flammable.

· Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines. • *Classification system:*

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



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Signal word Danger	(Contd. of page 1)
Hazard-determining components of labeling:	
Solvent naphtha (petroleum), light arom.	
1,2,4-trimethylbenzene	
butanol	
Hazard statements	
Highly flammable liquid and vapor.	
Suspected of causing cancer.	
1 0 0	
May cause respiratory irritation.	
Precautionary statements	
If medical advice is needed, have product container or label at hand.	
Keep out of reach of children.	
Read label before use.	
Keep away from heat/sparks/open flames/hot surfaces No smoking.	
Use explosion-proof electrical/ventilating/lighting/equipment.	
Avoid breathing dust/fume/gas/mist/vapors/spray	
Wear protective gloves / eye protection / face protection.	
Ground/bond container and receiving equipment.	
Use only non-sparking tools.	
Take precautionary measures against static discharge.	
Use only outdoors or in a well-ventilated area.	
Obtain special instructions before use.	
Do not handle until all safety precautions have been read and understood.	
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse s	skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for	breathing.
Call a poison center/doctor if you feel unwell.	
IF exposed or concerned: Get medical advice/attention.	
In case of fire: Use for extinction: CO2, powder or water spray.	
Store locked up.	
Store in a well-ventilated place. Keep container tightly closed.	
Store in a well-ventilated place. Keep cool.	
Dispose of contents/container in accordance with local/regional/national/international	regulations.
Classification system:	0
NFPA ratings (scale 0 - 4)	
Health = 1	
Fire = 3	
1 0 Reactivity = 0	
HMIS-ratings (scale 0 - 4)	
HEALTH 1 $Health = 1$	
FIRE 3 $Fire = 3$	
REACTIVITY O Reactivity = 0	
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 the substances listed below with nonhazardous additions.

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	(Co	ntd. of page
· Dangerous	components:	
64742-88-7	medium aliphatic hydrocarbon 🗙 Xn R65	50-100%
	🚸 Flam. Liq. 3, H226; 🚸 Asp. Tox. 1, H304	
64742-95-6	Solvent naphtha (petroleum), light arom. Xn R65; Xi R37; Zi R37; N R51/53 R10	10-25%
	🚸 Asp. Tox. 1, H304; 🕦 Acute Tox. 4, H332; STOT SE 3, H335; H227	1
95-63-6	1,2,4-trimethylbenzene Xn R20; Xi R36/37/38; 🕎 N R51/53 R10	2.5-10%
	� Flam. Liq. 3, H226; ⟨♪ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H31 STOT SE 3, H335	9;
78-92-2	butanol Xi R36/37 R10-67	2.5-10%
00 02 0	♦ Flam. Liq. 3, H226; ♦ Eye Irrit. 2, H319; STOT SE 3, H335-H336	< 2.50/
90-02-0	cumene Xn R65; Xi R37; W N R51/53 R10	<i>≤</i> 2.5%
	🚸 Flam. Liq. 3, H226; 🚯 Carc. 2, H351; Asp. Tox. 1, H304; 솻 STOT SE 3, H335	1

4 First-aid measures

· Description of first aid measures

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

• After skin contact: Generally the product does not irritate the skin.

• After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing: If symptoms persist consult 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 Fire-fighting 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). Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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· 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

• *Precautions for safe handling* Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

- Information about protection against explosions and fires: 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: No special requirements.
- · 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.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

95-63-6 1,2,4-trimethylbenzene

REL Long-term value: 125 mg/m³, 25 ppm

TLV Long-term value: 123 mg/m³, 25 ppm

78-92-2 butanol

PEL Long-term value: 450 mg/m³, 150 ppm

- REL Short-term value: 455 mg/m³, 150 ppm
- Long-term value: 305 mg/m³, 100 ppm
- TLV Long-term value: 300 mg/m³, 100 ppm

• 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. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.

· 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:

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

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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

Information on basic physical and c	hemical properties
General Information	
Appearance:	
Form: Color:	Liquid Colorless
Odor:	Aromatic
Odour threshold:	Not determined.
pH-value:	Not applicable
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	153 °C (307 °F)
Flash point:	22 °C (72 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	265 °C (509 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	0.7 Vol %
Upper:	7.5 Vol %
Vapor pressure at 20 $^{\circ}C$ (68 $^{\circ}F$):	6 hPa (5 mm Hg)
Density at 20 °C (68 °F):	0.8117 g/cm ³ (6.774 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wate	r): Not determined.
Viscosity:	
Dynamic:	Not determined
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	99.7 %

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VOC content: • Other information 99.7 % *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.
- $\cdot \textit{Incompatible materials: } No further relevant information available.$
- · 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:

64742-88-7 medium aliphatic hydrocarbon

 Oral
 LD50
 >6500 mg/kg (rat)

 Dermal
 LD50
 >3000 mg/kg (rab)

Inhalative LC50/4 h > 14 mg/l (rat)

64742-95-6 Solvent naphtha (petroleum), light arom.

		-	-	
Oral	LD50	>68	00 mg/k	g (rat)
			00 mg/k	
Inhalative	LC50/4 h	>10.	.2 mg/l (rat)

95-63-6 1,2,4-trimethylbenzene

Oral LD50 5000 mg/kg (rat)

· Primary irritant effect:

• on the skin: No irritant effect.

• 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

· IARC (Inte	rnational Agency for Research on Cancer)	
1330-20-7	xylene	3
98-82-8	cumene	2B
· NTP (Natio	onal Toxicology Program)	
None of the	e ingredients is listed.	
· OSHA-Ca	(Occupational Safety & Health Administration)	
None of the	e ingredients is listed.	

12 Ecological information

· Toxicity

• Aquatic toxicity: No further relevant information available.

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· Persistence and degradability No further relevant information available.

- · Bioaccumulative potential No further relevant information available.
- \cdot **Mobility in soil** No further relevant information available.
- · Ecotoxical effects:
- Remark: Toxic for fish
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- Also poisonous for fish and plankton in water bodies.
- Toxic for aquatic organisms
- · 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 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	UN1993
· UN proper shipping name	
·DOT	Flammable liquids, n.o.s. (medium aliphatic hydrocarbor
	Butanols)
ADR	1993 Flammable liquids, n.o.s. (medium aliphatic hydrocarbor
	Butanols), ENVIRONMENTALLY HAZARDOUS
IMDG	FLAMMABLE LIQUID, N.O.S. (medium aliphatic hydrocarbor
	BUTANOLS), MARINE POLLUTANT
IATA	FLAMMABLE LIQUID, N.O.S. (medium aliphatic hydrocarbor BUTANOLS)
• Transport hazard class(es) • DOT	
-	
DOT Class	3 Flammable liquids
· DOT · Class	3 Flammable liquids 3
· DOT · Class · Class · Label	
-	
· DOT · Class · Class · Label	

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	(Contd. of page
· Label	3
IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group · DOT, ADR, IMDG, IATA	II
Environmental hazards:	Product contains environmentally hazardous substance Solvent naphtha (petroleum), light arom.
Marine pollutant:	Yes
Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
	v v ,
Special precautions for user Danger code (Kemler):	Warning: Flammable liquids 33
EMS Number:	55 F-E,S-E
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L
2 .	On cargo aircraft only: 60 L
ADR	
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
	11
Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2
Excepted quantities (EQ)	Coae: E2 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 50 ml
UN ''Model Regulation'':	UN1993, Flammable liquids, n.o.s. (medium aliphat hydrocarbon, Butanols), ENVIRONMENTALLY HAZARDOU 3. II

15 Regulatory information

*

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 35	55 (extremely hazardous substances):	
None of the	e ingredients is listed.	
	3 (Specific toxic chemical listings):	
95-63-6	1,2,4-trimethylbenzene	
78-92-2	butanol	
1330-20-7	xylene	
98-82-8	cumene	
· TSCA (To:	xic Substances Control Act) All ingredients are listed	
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Proposition 65 Chemicals known to cause cancer:	
98-82-8 cumene	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
Carcinogenic categories	
EPA (Environmental Protection Agency)	
1330-20-7 xylene	Ι
98-82-8 cumene	D, CBD
TLV (Threshold Limit Value established by ACGIH)	
1330-20-7 xylene	A4
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
GHS label elements	
The product is classified and labeled according to the Globally Harmonized Systen Hazard pictograms	n (GHS).
GHS02 GHS07 GHS08	
011502 011507 011500	
Signal word Danger	

Solvent naphtha (petroleum), light arom. 1,2,4-trimethylbenzene butanol · Hazard statements Highly flammable liquid and vapor. Suspected of causing cancer. May cause respiratory irritation. · Precautionary statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. *Use explosion-proof electrical/ventilating/lighting/equipment.* Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves / eye protection / face protection. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

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In case of fire: Use for extinction: CO2, powder or water spray. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. 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.

· Date of preparation / last revision 10/07/2014 / 5

· 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 Flam. Liq. 2: Flammable liquids, Hazard Category 2 Flam. Liq. 3: Flammable liquids, Hazard Category 3 : Flammable liquids, Hazard Category 4 Acute Tox. 4: Acute toxicity, Hazard Category 4 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Carc. 2: Carcinogenicity, Hazard Category 2 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 Asp. Tox. 1: Aspiration hazard, Hazard Category 1 \cdot * Data compared to the previous version altered.