Printing date 11/24/2011 Reviewed on 11/24/2011

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

- · Product identifier
- · Trade name: Derval Bright
- · Application of the substance / the preparation

Liquid highly concentrated laundry booster with optical brightener. Particularly efficient for natural oils and fat even at temperatures of 60 °C. For white textiles made of cotton, polyester and blended fabrics.

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:
- · Manufacturer:

Chemische Fabrik Kreussler & Co. GmbH

Postfach 120454

D-65082 Wiesbaden

· Supplier:

Kreussler Inc., 8426 Sunstate Street, Tampa, FL 33634,

Phone 813-884-1499, Fax 813-884-1599,

Internet: www.kreussler.com, e-mail: office-tampa@kreussler.com

· Information department:

Abteilung TQM

Herr Vogel

+49 (0) 611 9271-175

Kurt.Vogel@kreussler.com

· Emergency telephone number: +49 (0) 611 9271-0

2 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:						
	Alcohols C13-C15 branched and linear, ethoxylated Xn R22; Xi R41 30-50%					
85422-93-1	Alcohols, C10-18, ethoxylated	Xi R41	15-30%			
112-34-5	2-(2-butoxyethoxy)ethanol	Xi R36	5.0-15%			
67-63-0	propan-2-ol	Xi R36; F R11 R67	1.0-5.0%			

[·] Additional information: For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Harmful

Harmful if swallowed.

Irritant

Risk of serious damage to eyes.

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

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

(Contd. on page 2)

Printing date 11/24/2011 Reviewed on 11/24/2011

Trade name: Derval Bright

(Contd. of page 1)

· Code letter and hazard designation of product:



Xn Harmful

· Hazard-determining components of labelling:

Alcohols C13-C15 branched and linear, ethoxylated

· Risk phrases:

Harmful if swallowed.

Risk of serious damage to eyes.

· Safety phrases:

Avoid contact with eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

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



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 1

Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

4 First aid measures

- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Rinse with warm water.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Seek immediate medical advice.

5 Firefighting measures

· Suitable extinguishing agents:

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

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture Product itself does not burn.
- · Protective equipment: Use normal protective clothing.
- · Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

Printing date 11/24/2011 Reviewed on 11/24/2011

Trade name: Derval Bright

(Contd. of page 2)

· 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.

· 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.
- · Information about protection against explosions and fires: No special measures required.
- · 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: None.
- · 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.

· Com	onents	with	limit	values	that	require	monito	ring a	at the	work	olace:

112-34-5 2-(2-butoxyethoxy)ethanol (5.0-15%)

TLV 50 mg/m³, NIC-7 ppm

Inhalable fraction and vapor

67-63-0 propan-2-ol (1.0-5.0%)

PEL 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm

Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm

Long-term value: 492 mg/m³, 200 ppm

BEI

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

The usual precautionary measures for handling chemicals should be followed.

Do not eat, drink, smoke or sniff while working.

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: Not required.
- · Protection of hands:



Protective gloves

· Material of gloves

PVC or PE gloves

Recommended thickness of the material: $\geq 0.4 \text{ mm}$

· Not suitable are gloves made of the following materials:

Leather gloves

Strong gloves

(Contd. on page 4)

Printing date 11/24/2011 Reviewed on 11/24/2011

Trade name: Derval Bright

(Contd. of page 3)

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· General Information

· Appearance:

Form: Fluid Color: Violet

· Odor: Characteristic

• pH-value at 20°C (68 °F): 8.4

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

• Flash point: > 100°C (> 212 °F)

· Auto igniting: Product is not selfigniting.

• **Danger of explosion:** Product does not present an explosion hazard.

• **Density at 20°C (68 °F):** 0.98 g/cm³ (8.178 lbs/gal)

· Solubility in / Miscibility with

Water: Fully miscible.

· Viscosity:

Dynamic at 20°C (68 °F): 77 mPas

· Solvent content:

Organic solvents: 2.5 %

• Other information No further relevant information available.

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

Alcohols C13-C15 branched and linear, ethoxylated

Oral LD-50 >2000 mg/kg (rat)

- Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

Harmful

(Contd. on page 5)

Printing date 11/24/2011 Reviewed on 11/24/2011

Trade name: Derval Bright

(Contd. of page 4)

Irritant

12 Ecological information

· Aquatic toxicity:

Alcohols C13-C15 branched and linear, ethoxylated

EC-50 48h 0.1-1 mg/l (Daphnia magna)

EC-50 72h 0.1-1 mg/l (Scenedesmus subspicatus)

LC-50 96h 1-10 mg/l (Brachydanio rerio)

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Additional ecological information:
- · General notes:

The product may not be released into the environment without control.

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Dispose of in accordance with local, state, and federal Regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
UN proper shipping nameDOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
Packing group DOT, ADR, IMDG, IATA	Void
Environmental hazards: Marine pollutant:	No
· Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	F Not applicable.

15 Regulatory information

- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

(Contd. on page 6)

Printing date 11/24/2011 Reviewed on 11/24/2011

Trade name: Derval Bright

	(Contd. of no.
Section 313 (Specific toxic chemical listings):	(Contd. of pag
67-63-0 propan-2-ol	
TSCA (Toxic Substances Control Act):	
85422-93-1 Alcohols, C10-18, ethoxylated	
112-34-5 2-(2-butoxyethoxy)ethanol	
2425-77-6 2-Hexyldecan-1-ol	
67-63-0 propan-2-ol	
27344-41-8 Disodium 4,4'-bis(2-sulfostyryl)biphenyl	
7732-18-5 water, distilled, conductivity or of similar purity	
Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
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.	
Cancerogenity categories	
EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
IARC (International Agency for Research on Cancer)	
67-63-0 propan-2-ol	
NTP (National Toxicology Program)	
None of the ingredients is listed.	
TLV (Threshold Limit Value established by ACGIH)	
67-63-0 propan-2-ol	
MAK (German Maximum Workplace Concentration)	
None of the ingredients is listed.	
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
Canadien Substances Listings:	
Canadien Domestic Substances List (DSL):	
Alcohols C13-C15 branched and linear, ethoxylated	
112-34-5 2-(2-butoxyethoxy)ethanol	
2425-77-6 2-Hexyldecan-1-ol	
67-63-0 propan-2-ol	
27344-41-8 Disodium 4,4'-bis(2-sulfostyryl)biphenyl	
Canadien Ingredient disclosure list (limit 0.1%)	
Alcohols C13-C15 branched and linear, ethoxylated	
112-34-5 2-(2-butoxyethoxy)ethanol	
2425-77-6 2-Hexyldecan-1-ol	
67-63-0 propan-2-ol	
27344-41-8 Disodium 4,4'-bis(2-sulfostyryl)biphenyl	
7732-18-5 water, distilled, conductivity or of similar purity	

Printing date 11/24/2011 Reviewed on 11/24/2011

Trade name: Derval Bright

(Contd. of page 6)

· Canadier	n Ingredient disclosure list (limit 1%)
112-34-5	2-(2-butoxyethoxy)ethanol
67-63-0	propan-2-ol

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:



Xn Harmful

· Hazard-determining components of labelling:

Alcohols C13-C15 branched and linear, ethoxylated

· Risk phrases:

Harmful if swallowed.

Risk of serious damage to eyes.

· Safety phrases:

Avoid contact with eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable gloves and eye/face protection.

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.

The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.

The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.

Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

· Department issuing MSDS:

Abteilung TQM Herr Vogel

+49 (0) 611/9271-175

· Contact: Herr Vogel

USA —