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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product code **PANNDCF**
Product name **Flush Solution - DTG 640**
Product category **Ink Product**

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

Recommended use Printing operations

1.3 Details of the supplier of the safety data sheet

UNITED STATES	UNITED KINGDOM
Nazdar Company	Nazdar Limited
8501 Hedge Lane Terrace	Barton Road
Shawnee, KS 66227	Heaton Mersey
Tel: 1-913-422-1888	Stockport, England SK4 3EG
Tel: 1-800-677-4657	Tel: +44 161 442 2111
Fax: 1-913-422-2294	
www.nazdar.com	

For further information, please contact

Contact person Regulatory Compliance: Tel: 1-913-422-1888 (ext 2305)
E-mail address regcomp@nazdar.com

1.4 Emergency telephone number

USA: Chemtrec: 1-800-424-9300
Outside USA: Chemtrec: 1-703-527-3887
24 Hour Emergency Phone Number

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Skin Corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)

2.2 Label elements



Signal Word
Warning

Hazard Statements
H302 - Harmful if swallowed

H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 EUH208 - May produce an allergic reaction

Precautionary Statements

P270 - Do not eat, drink or smoke when using this product
 P330 - Rinse mouth
 P332 + P313 - If skin irritation occurs: Get medical advice/attention
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/attention

2.3 Other Hazards

General Hazards No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Component	EC No.	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH No.	Note
2-Butoxyethanol	203-905-0	111-76-2	10 - 30	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	No data available	1
Glycerol	200-289-5	56-81-5	10 - 30	Not Classified	No data available	1
Ethylene glycol	203-473-3	107-21-1	5 - 10	Acute Tox. 4 (H302)	No data available	1
Isopropyl alcohol	200-661-7	67-63-0	1 - 5	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)	No data available	1
Diethylene glycol monobutyl ether	203-961-6	112-34-5	1 - 5	Eye Irrit. 2 (H319)	No data available	1
1,2-Benzisothiazolin-3-one	220-120-9	2634-33-5	< 0.1	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)	No data available	

Note
 1. Substance with a Community workplace exposure limit

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance.
Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.
Inhalation Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

None under normal use conditions.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

6.4 Reference to other sections

See Section 12 for more information.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children. Do not freeze.

7.3 Specific end use(s)

Exposure Scenario

No information available.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits

Component	European Union
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Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³
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Component	The United Kingdom
2-Butoxyethanol 111-76-2	STEL: 50 ppm STEL: 246 mg/m ³ TWA: 25 ppm TWA: 123 mg/m ³ Skin
Glycerol 56-81-5	STEL: 30 mg/m ³ mist TWA: 10 mg/m ³ mist
Ethylene glycol 107-21-1	STEL: 40 ppm vapour STEL: 104 mg/m ³ vapour STEL: 30 mg/m ³ particulate TWA: 10 mg/m ³ particulates TWA: 20 ppm vapour TWA: 52 mg/m ³ vapour Skin
Isopropyl alcohol 67-63-0	STEL: 500 ppm STEL: 1250 mg/m ³ TWA: 400 ppm TWA: 999 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³

Component	France
2-Butoxyethanol 111-76-2	TWA/VME: 10 ppm restrictive limit TWA/VME: 49 mg/m ³ restrictive limit STEL/VLCT: 50 ppm restrictive limit STEL/VLCT: 246 mg/m ³ restrictive limit Skin
Glycerol 56-81-5	TWA/VME: 10 mg/m ³ aerosol
Ethylene glycol 107-21-1	TWA/VME: 20 ppm vapor indicative limit TWA/VME: 52 mg/m ³ vapor indicative limit STEL/VLCT: 40 ppm indicative limit vapor STEL/VLCT: 104 mg/m ³ indicative limit vapor Skin
Isopropyl alcohol 67-63-0	STEL/VLCT: 400 ppm STEL/VLCT: 980 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	TWA/VME: 10 ppm indicative limit TWA/VME: 67.5 mg/m ³ indicative limit STEL/VLCT: 15 ppm indicative limit STEL/VLCT: 101.2 mg/m ³ indicative limit

Component	Germany
2-Butoxyethanol 111-76-2	TWA/MAK: 10 ppm TWA/MAK: 49 mg/m ³ Skin Peak: 20 ppm Peak: 98 mg/m ³ TWA/AGW: 10 ppm TWA/AGW: 49 mg/m ³
Glycerol 56-81-5	TWA/MAK: 200 mg/m ³ inhalable fraction Peak: 400 mg/m ³ inhalable fraction
Ethylene glycol 107-21-1	TWA/MAK: 10 ppm TWA/MAK: 26 mg/m ³ Skin Peak: 20 ppm Peak: 52 mg/m ³ TWA/AGW: 10 ppm TWA/AGW: 26 mg/m ³
Isopropyl alcohol 67-63-0	TWA/MAK: 200 ppm TWA/MAK: 500 mg/m ³ Peak: 400 ppm

	Peak: 1000 mg/m ³ TWA/AGW: 200 ppm TWA/AGW: 500 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	TWA/MAK: 67 mg/m ³ TWA/MAK: 10 ppm Peak: 15 ppm Peak: 100.5 mg/m ³ TWA/AGW: 10 ppm TWA/AGW: 67 mg/m ³

Component	Spain
2-Butoxyethanol 111-76-2	Skin STEL/VLA-EC: 50 ppm STEL/VLA-EC: 245 mg/m ³ TWA/VLA-ED: 20 ppm TWA/VLA-ED: 98 mg/m ³
Glycerol 56-81-5	TWA/VLA-ED: 10 mg/m ³ mist
Ethylene glycol 107-21-1	Skin STEL/VLA-EC: 40 ppm STEL/VLA-EC: 104 mg/m ³ TWA/VLA-ED: 20 ppm TWA/VLA-ED: 52 mg/m ³
Isopropyl alcohol 67-63-0	STEL/VLA-EC: 400 ppm STEL/VLA-EC: 1000 mg/m ³ TWA/VLA-ED: 200 ppm TWA/VLA-ED: 500 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	STEL/VLA-EC: 15 ppm STEL/VLA-EC: 101.2 mg/m ³ TWA/VLA-ED: 10 ppm TWA/VLA-ED: 67.5 mg/m ³

Component	Italy
2-Butoxyethanol 111-76-2	TWA: 20 ppm TWA: 98 mg/m ³ STEL: 50 ppm STEL: 246 mg/m ³ Skin
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³

Component	Portugal
2-Butoxyethanol 111-76-2	STEL/VLE-CD: 50 ppm STEL/VLE-CD: 246 mg/m ³ TWA/VLE-MP: 20 ppm TWA/VLE-MP: 98 mg/m ³ Skin
Glycerol 56-81-5	TWA/VLE-MP: 10 mg/m ³ mist
Ethylene glycol 107-21-1	STEL/VLE-CD: 40 ppm STEL/VLE-CD: 104 mg/m ³ Ceiling/VLE-CM: 100 mg/m ³ aerosol only TWA/VLE-MP: 20 ppm TWA/VLE-MP: 52 mg/m ³ Skin
Isopropyl alcohol 67-63-0	STEL/VLE-CD: 400 ppm TWA/VLE-MP: 200 ppm
Diethylene glycol monobutyl ether 112-34-5	STEL/VLE-CD: 15 ppm STEL/VLE-CD: 101.2 mg/m ³ TWA/VLE-MP: 10 ppm TWA/VLE-MP: 67.5 mg/m ³

Component	The Netherlands
2-Butoxyethanol 111-76-2	Skin STEL: 246 mg/m ³ TWA: 100 mg/m ³
Ethylene glycol 107-21-1	Skin STEL: 104 mg/m ³ TWA: 52 mg/m ³ fume TWA: 10 mg/m ³ droplets
Diethylene glycol monobutyl ether 112-34-5	Skin STEL: 100 mg/m ³ TWA: 50 mg/m ³

Component	Finland
2-Butoxyethanol 111-76-2	TWA: 20 ppm TWA: 98 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ Skin
Glycerol 56-81-5	TWA: 20 mg/m ³
Ethylene glycol 107-21-1	TWA: 20 ppm TWA: 50 mg/m ³ STEL: 40 ppm STEL: 100 mg/m ³ Skin
Isopropyl alcohol 67-63-0	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 620 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 68 mg/m ³

Component	Denmark
2-Butoxyethanol 111-76-2	TWA: 20 ppm TWA: 98 mg/m ³ Skin
Ethylene glycol 107-21-1	TWA: 10 ppm TWA: 26 mg/m ³ TWA: 10 mg/m ³ vapor Skin
Isopropyl alcohol 67-63-0	TWA: 200 ppm TWA: 490 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 68 mg/m ³

Component	Austria
2-Butoxyethanol 111-76-2	Skin STEL/KZW: 40 ppm STEL/KZW: 200 mg/m ³ TWA/TMW: 20 ppm TWA/TMW: 98 mg/m ³
Ethylene glycol 107-21-1	Skin STEL/KZW: 20 ppm STEL/KZW: 52 mg/m ³ TWA/TMW: 10 ppm TWA/TMW: 26 mg/m ³
Isopropyl alcohol 67-63-0	STEL/KZW: 800 ppm STEL/KZW: 2000 mg/m ³ STEL/KZW: 800 ppm STEL for large casting valid till 12/31/2013 STEL/KZW: 2000 mg/m ³ STEL for large casting valid till 12/31/2013 TWA/TMW: 200 ppm short time value for large casting TWA/TMW: 500 mg/m ³ short time value for large casting
Diethylene glycol monobutyl ether 112-34-5	STEL/KZW: 15 ppm STEL/KZW: 101.2 mg/m ³ TWA/TMW: 10 ppm TWA/TMW: 67.5 mg/m ³

Component	Switzerland
2-Butoxyethanol 111-76-2	Skin STEL/KZW: 20 ppm STEL/KZW: 98 mg/m ³ TWA/MAK: 10 ppm TWA/MAK: 49 mg/m ³
Glycerol 56-81-5	STEL/KZW: 100 mg/m ³ inhalable dust TWA/MAK: 50 mg/m ³ inhalable dust
Ethylene glycol 107-21-1	Skin STEL/KZW: 20 ppm STEL/KZW: 52 mg/m ³ TWA/MAK: 10 ppm TWA/MAK: 26 mg/m ³
Isopropyl alcohol 67-63-0	STEL/KZW: 400 ppm STEL/KZW: 1000 mg/m ³ TWA/MAK: 200 ppm TWA/MAK: 500 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	STEL/KZW: 15 ppm STEL/KZW: 101 mg/m ³ TWA/MAK: 10 ppm TWA/MAK: 67 mg/m ³

Component	Poland
2-Butoxyethanol 111-76-2	STEL/NDSch : 200 mg/m ³ TWA/NDS: 98 mg/m ³
Glycerol 56-81-5	TWA/NDS: 10 mg/m ³ inhalable fraction
Ethylene glycol 107-21-1	STEL/NDSch : 50 mg/m ³ TWA/NDS: 15 mg/m ³
Isopropyl alcohol 67-63-0	STEL/NDSch : 1200 mg/m ³ TWA/NDS: 900 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	STEL/NDSch : 100 mg/m ³ TWA/NDS: 67 mg/m ³

Component	Norway
2-Butoxyethanol 111-76-2	TWA: 10 ppm TWA: 50 mg/m ³ Skin
Ethylene glycol 107-21-1	TWA: 20 mg/m ³ dust equal to the standard for nuisance dust TWA: 52 ppm total dust and vapor Total sum of limit values for both vapor and dust TWA: 52 mg/m ³ Total sum of limit values for both vapor and dust Skin
Isopropyl alcohol 67-63-0	TWA: 100 ppm TWA: 245 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 68 mg/m ³

Component	Ireland
2-Butoxyethanol 111-76-2	TWA: 20 ppm TWA: 98 mg/m ³ STEL: 50 ppm STEL: 246 mg/m ³ Skin
Glycerol 56-81-5	TWA: 10 mg/m ³ mist STEL: 30 mg/m ³ mist calculated
Ethylene glycol 107-21-1	TWA: 10 mg/m ³ particulate TWA: 20 ppm vapour TWA: 52 mg/m ³ vapour STEL: 40 ppm particulate STEL: 104 mg/m ³ vapour Skin
Isopropyl alcohol 67-63-0	TWA: 200 ppm STEL: 400 ppm Skin
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm

	STEL: 101.2 mg/m ³
Component	Australia TWA
2-Butoxyethanol 111-76-2	TWA: 20 ppm TWA: 96.9 mg/m ³
Glycerol 56-81-5	TWA: 10 mg/m ³ inhalable dust, mist containing no asbestos and <1% crystalline silica
Ethylene glycol 107-21-1	TWA: 10 mg/m ³ particulate TWA: 20 ppm vapour TWA: 52 mg/m ³ vapour
Isopropyl alcohol 67-63-0	TWA: 400 ppm TWA: 983 mg/m ³
Component	Australia STEL
2-Butoxyethanol 111-76-2	STEL: 50 ppm STEL: 242 mg/m ³
Ethylene glycol 107-21-1	STEL: 40 ppm vapour STEL: 104 mg/m ³ vapour
Isopropyl alcohol 67-63-0	STEL: 500 ppm STEL: 1230 mg/m ³

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

8.2 Exposure controls
Engineering Measures

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

Personal protective equipment
Eye/face Protection

Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Colored
Odor	No information available	Odor Threshold	No information available
Property	Values	Remarks • Method	
pH		No data available	
Melting point/freezing point		No data available	
Boiling point/Boiling Range	> 100 °C / 212 °F		
Flash Point	> 94 °C / > 201 °F	No data available	
Evaporation rate		No data available	
Flammability Limit in Air			
Upper flammability limit		No data available	
Lower flammability limit		No data available	

Vapor Pressure		No data available
Vapor Density		No data available
Specific Gravity	1	
Water Solubility		No data available
Solubility in other solvents		No data available
Partition coefficient: n-octanol/water		No data available
Autoignition Temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Explosive Properties	No data available	
Oxidizing Properties	No data available	

9.2 Other information

Softening Point No data available

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of Hazardous Reactions

None under normal processing.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Do not freeze.

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO₂). Carbon monoxide.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Inhalation	There is no data for this product.
Eye Contact	There is no data for this product.
Skin Contact	There is no data for this product.
Ingestion	There is no data for this product.

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	1,414.00
ATEmix (dermal)	3,749.00
ATEmix (inhalation-dust/mist)	6.00
ATEmix (inhalation-vapor)	44.00

Unknown Acute Toxicity

- 0 % of the mixture consists of ingredient(s) of unknown toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component	Oral LD50
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)
Glycerol 56-81-5	= 12600 mg/kg (Rat)
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)
Diethylene glycol monobutyl ether 112-34-5	= 5660 mg/kg (Rat)
1,2-Benzisothiazolin-3-one 2634-33-5	= 1020 mg/kg (Rat)

Component	LD50 Dermal
2-Butoxyethanol 111-76-2	= 99 mg/kg (Rabbit)
Glycerol 56-81-5	> 10 g/kg (Rabbit)
Ethylene glycol 107-21-1	= 10600 mg/kg (Rat)
Isopropyl alcohol 67-63-0	= 4059 mg/kg (Rabbit)
Diethylene glycol monobutyl ether 112-34-5	= 2700 mg/kg (Rabbit)

Component	Inhalation LC50
2-Butoxyethanol 111-76-2	= 450 ppm (Rat) 4 h
Glycerol 56-81-5	> 570 mg/m ³ (Rat) 1 h
Isopropyl alcohol 67-63-0	= 72600 mg/m ³ (Rat) 4 h

Skin corrosion/irritation There is no data for this product.
Eye damage/irritation There is no data for this product.
Sensitisation There is no data for this product.
Mutagenic Effects There is no data for this product.
Carcinogenic effects There is no data for this product.
Reproductive Effects There is no data for this product.

STOT - single exposure There is no data for this product.
STOT - repeated exposure There is no data for this product.
Aspiration hazard There is no data for this product.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity
None known

Unknown Aquatic Toxicity
0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Algae/aquatic plants
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50
Isopropyl alcohol 67-63-0	1000: 96 h Desmodemus subspicatus mg/L EC50 1000: 72 h Desmodemus subspicatus mg/L EC50
Diethylene glycol monobutyl ether 112-34-5	100: 96 h Desmodemus subspicatus mg/L EC50

Component	Fish
2-Butoxyethanol 111-76-2	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50
Glycerol 56-81-5	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static
Ethylene glycol 107-21-1	41000: 96 h Oncorhynchus mykiss mg/L LC50 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static
Isopropyl alcohol 67-63-0	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50
Diethylene glycol monobutyl ether 112-34-5	1300: 96 h Lepomis macrochirus mg/L LC50 static

Component	Crustacea
2-Butoxyethanol 111-76-2	1000: 48 h Daphnia magna mg/L EC50
Ethylene glycol 107-21-1	46300: 48 h Daphnia magna mg/L EC50
Isopropyl alcohol 67-63-0	13299: 48 h Daphnia magna mg/L EC50
Diethylene glycol monobutyl ether 112-34-5	100: 48 h Daphnia magna mg/L EC50

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

Component	Partition coefficient
2-Butoxyethanol 111-76-2	0.81
Glycerol 56-81-5	-1.76
Ethylene glycol 107-21-1	-1.93
Isopropyl alcohol 67-63-0	0.05
1,2-Benzisothiazolin-3-one 2634-33-5	1.3

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects.

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from Residues / Unused Products Contain and dispose of waste according to local regulations.

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

