



Version No: 1037/101/version3

Date: January 14, 2015

Supersedes: November 13, 2013

PRODUCT NAME: PES 104 POWERMETAL REPAIR FLUID XF
DISTRIBUTOR: Plant Equipment & Svcs,
5401 HWY 21 W, BRYAN, TX. 77803
TELEPHONE NUMBER: 979-779-8700
EMAIL: pes1@pes-solutions.com

EMERGENCY TELEPHONE NUMBER: 979-779-8700

THIS PRODUCT IS A KIT AND SUPPLIED AS A MULTI PART PRODUCT WHICH CONSISTS OF A BASE COMPONENT AND ACTIVATOR COMPONENT. THIS DOCUMENT CONTAINS THE MSDS FOR BOTH BASE AND ACTIVATOR COMPONENTS.

DISCLAIMER: The information supplied in the MSDS is correct at the time of writing and date of issue. No warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for particular purpose or course of performance or usage of trade. The user of the material is responsible for ensuring the suitability of this product for application.



Version No: 1037/101/version3

Date: January 14, 2015

Supersedes: November 13, 2013

Date of issue: January 14,

2015 Document Number

1037/101/version 3:

SECTION 1: Identification of Substance/ Preparation and Company

- 1.1 Product identifier
PES POWER METAL 104 REPAIR FLUID ACTIVATOR
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Polymercaptan Curing Agent
- 1.3 Details of the supplier of the safety data sheet
5401 HWY 21 W, BRYAN, TX 77803
Tel: 979-779-8700
Email: pes1@pes-solutions.com
- 1.4 Emergency telephone number
Chemtrec – 800-424-9300 (24 hrs.)

SECTION 2: Hazards Identification

- 2.1 Classification of the substance or mixture

Classification in accordance with the Dangerous Preparations Directive 1999/45/EC

Skin Irritation	Category 2
H315 Causes skin irritation	
Serious Eye Irritation	Category 2
H319 Causes Serious Eye Irritation	
Skin Sensitizer	Category 1
H317 May Cause an allergic Skin Reaction	
Chronic Hazards to the Aquatic Environment	Category 3
H412 Harmful to Aquatic life with long lasting effects	
Sensitizing	
R43 May cause sensitization by skin contact	
Xi – irritant	
R36/38 irritating to eyes and skin	
Dangerous to the environment	
R52/53	Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment
Xn; R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
C; R34	Causes burns
R43	May cause sensitization by skin contact
Muta. 3; R68	Possible risk of irreversible effects

Repr. 2; R62 Possible risk of impaired fertility
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2.2 Label elements

Labeling in accordance with the Classification Labeling and Packaging Regulation EC (no) 1272/2008

Pictograms:



Signal Word: **WARNING**

Hazard statements: H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H319: Causes serious eye irritation
 H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

P101: if medical advice is needed have product container or label at hand
P102: Keep out of reach of children
P501: Dispose of waste and residues in accordance with local authority requirements

Precautionary statements:

PREVENTION P273: Avoid release to the environment
 P280 Wear protective gloves

Precautionary statements:

RESPONSE P302+P352 IF ON SKIN: Wash with plenty soap and water
 P333+P313: If skin irritation or rash occurs: Get medical advice/ attention
 P337+ P313: If eye irritation persists: Get medical advice/ attention

2.3 Other hazards

If released into watercourses in sufficient quantities may be harmful to aquatic life. None of the components are considered to be Persistent, Bioaccumulative and Toxic (PBT) or very Persistent, very Bioaccumulative (vPvB).

SECTION 3: Composition/ Information on Ingredients

3.1 Substances

Not applicable, product is a mixture.

3.2 Mixtures

Contains no hazardous materials above the required thresholds

See section 16 for full description of R phrases and H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

Summon immediate medical assistance after contact with skin, eyes, inhalation or ingestion

Eye: Flush eyes with plenty of running water for 15 minutes, whilst gently holding the eyelids open.

Skin: Remove product and contaminated clothing and wash area with water.

Ingestion: Drink plenty of water, DO NOT INDUCE VOMITING. Seek medical attention immediately.

Inhalation: Remove patient to fresh air. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

SKIN: Redness, Inflammation

SKIN: Rash, Urticaria

EYE: Irritation, Conjunctivitis

4.3 Indication of any immediate medical attention and special treatments needed

Symptomatic treatment as required

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

Dry chemical, CO₂ or Alcohol foam

5.2 Special hazards arising from the substance or mixture

In the event of fire carbon monoxide, carbon dioxide and nitrogen oxides can be released

5.3 Advice for fire fighters

Wear Self-contained breathing apparatus, rubber boots, gloves and bodysuit

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact

6.2 Environmental precautions

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform the appropriate environmental authorities.

6.3 Methods and materials for containment and clearing up

Scrape up and transfer into a suitable container. Wash area with water.

6.4 References to other sections

Refer to section 5, 8 and 13 for protective Measures and Disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing. Handle in well ventilated area. Wash hands after contact.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well ventilated area.

7.3 Specific end uses(s)

No industrial or sector specific guidance available.

SECTION 8: Exposure Controls/ Personal Protection

8.1 Control parameters

Substance Name	8 hour exposure limit	15 min exposure limit	Notes, Source
Talc, Respirable dust 14807-96-6	-	—	EH40 WEL

8.2 Exposure controls

Engineering controls Adequate ventilation should be provided so that exposure limits are not exceeded.
Respiratory: Avoid Breathing Vapors, Mists or Sprays; Select and use respiratory protection. Suggested filter type AP2.

Hand Protection Wear suitable chemical resistant gloves recommended. Nitrile or neoprene gloves may be suitable, but glove manufacturers' specifications should always be checked first. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Skin Protection: Avoid Skin Contact; use disposable coveralls

Eye Protection: Avoid Eye Contact; use safety goggles meeting the requirements of BS EN166 3, when handling this product

Environmental Exposure controls Take suitable measures to prevent entry into drains, sewers and watercourses.

SECTION 9: Physical/ Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Paste
Odor: Strong
Odor threshold: No data
PH: No data



Material Safety Data Sheet

Melting Point:	>356F
Boiling Point/ Range:	>167F
Flash Point;	>212F
Evaporation Rate:	No data
Flammability:	Not applicable
Upper/lower flammability limits:	No data
Vapor Pressure:	No data
Vapor density:	No data
Relative density:	1.8g/cm ³ at 68F
Solubility in water:	Insoluble in water
Solubility in other solvents:	No data
Partition Coefficient:	No data
Autoignition temperature:	No data
Decomposition temperature:	No data
Viscosity:	No data
Explosive properties:	Not classified as explosive
Oxidizing properties:	Not classified as oxidizing

9.2 Other information

None.

SECTION 10: Stability And Reactivity

10.1 Reactivity

Reaction with
strong acids
Reacts with strong
oxidants

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous Polymerization is not likely to occur.

10.4 Conditions to avoid

None if used for intended purpose

10.5 Incompatible materials

See section reactivity

10.6 Hazardous decomposition products

None known



Material Safety Data Sheet

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgments on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity	LD50 >200mg/kg ORAL Rat
(b) skin corrosion/irritation	LD50 23.000 mg/kg DERMAL Rabbit
(c) serious eye damage/irritation	Not irritating. Rabbit. OECD Guideline 405 (Acute eye irritation/corrosion)
(d) respiratory/skin sensitization	Sensitizing. Mouse local lymphnode assay (LLNA) OECD Guideline 472 (Genetic toxicology: Escherichia Coli Reverse Mutation Assay)
(e) germ cell mutagenicity	Negative. Bacterial reverse mutation assay (e.g. Ames test). OECD Guideline 472) Genetic Toxicology Escherichia Coli Reverse Mutation Assay)
(f) carcinogenicity	Contains no substances identified as carcinogens.

SECTION 12: Ecological Information

This product has not been tested. Judgments on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

This product contains components which are considered to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Once cured the toxicity of the product is expected to decrease.

12.2 Persistence and degradability

This product is not expected to be readily biodegradable.

12.3 Bioaccumulative potential

This product is expected to have a low bioaccumulation potential.

12.4 Mobility in soil

Cured product is expected to be immobile.

12.5 Results of PBT and vPvB assessment

None of the components are known to be PBT or vPvB.

12.6 Other adverse effects

None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

In uncured state, dispose as chemical waste in accordance with local regulations. Waste from this product may present long term environmental hazards. Thus landfill sites must be considered less acceptable than incineration.

In cured state when mixed correctly with the base component, dispose as



Material Safety Data Sheet

solid waste Empty containers should be disposed of as chemical waste.

SECTION 14: Transport Information

General: Transport and labeling requirements will alter depending on the size of the packaging.
Please refer to local transport regulations.

	ADR	IMDG	ICAO
14.1 UN Number	Not Hazardous	Not Hazardous	Not Hazardous
14.2 UN Proper shipping name	Not Hazardous	Not Hazardous	Not Hazardous
14.3 Transport hazard class(es)	Not Hazardous	Not Hazardous	Not Hazardous
14.4 Packing group	Not Hazardous	Not Hazardous	Not Hazardous
14.5 Environmental hazards	Not Hazardous	Not Hazardous	Not Hazardous
14.6 Special precautions for user	Not Hazardous	Not Hazardous	Not Hazardous
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory Information

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

All components are listed as existing substances in Europe

All components are listed, or are exempt from listing on the TCSA Inventory

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Revision information:

Reformatted in accordance with Regulation 453/2010 and Regulation 1272/2008.

List of Abbreviations used in this SDS:

CAS	Chemical Abstracts Service
CLP	Classification, Labeling and Packaging Regulation (EC) no 1272/2008
DSD	Dangerous Substances Directive 67/548/EEC
DPD	Dangerous Preparations Directive 1999/45/EC
EC	European Community/Commission
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB	very Persistent, very Bioaccumulative



Material Safety Data Sheet

References:

ECHA Classification and Labeling inventory
ECHA database of disseminated
registration dossiers Supplier's Safety
Data Sheets

Method used for classification of mixtures:

Ingredient based approaches

R Phrases and H Statements used in Section 3

R36/38	Irritating to eyes and skin,
R43	May cause sensitization by skin contact
R52	Harmful to aquatic organisms
R52/53	Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment,
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Training requirements for workers

No special training requirements.

SECTION 1: Identification of Substance/ Preparation and Company

- 1.2 Product identifier
PES POWER METAL 104 REPAIR FLUID XF BASE
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Epoxy Resin with inert talcs and fillers
- 1.3 Details of the supplier of the safety data sheet
5401 HWY 21 W, BRYAN, TX. 77803
Tel: 979-779-8700
Email: pes1@pes-solutions.com
- 1.4 Emergency telephone number
Chemtrec – 800-424-9300 (24 hrs.)

SECTION 2: Hazards Identification

- 2.1 Classification of the substance or mixture

Classification in accordance with the Dangerous Preparations

Directive 1999/45/EC Xi; R36/38	Irritating to eyes and skin
R43	May cause sensitization by skin contact
N; R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Classification in accordance with the Classification Labeling and Packaging Regulation EC

(no) 1272/2008

Skin Irritant Category 2	H315 Causes skin irritation
Eye Irritant Category 2	H319 Causes serious eye irritation
Skin Sensitizer Category 1	H317 May cause an allergic skin reaction
Aquatic Chronic Category 2	H411 Toxic to aquatic life with long lasting effects

- 2.2 Label elements
Labeling in accordance with the Classification Labeling and Packaging Regulation EC (no) 1272/2008

Pictograms:





Material Safety Data Sheet

Signal Word: WARNING

Hazard statements:
 H315 Causes skin irritation
 H319 Causes serious eye irritation
 H317 May cause an allergic skin reaction
 H411 Toxic to aquatic life with long lasting effects

Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.

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. P501: Dispose of contents/container as hazardous waste

2.3 Other hazards

May cause irritation to the eyes and skin, and if ingested, to the gastrointestinal tract. May cause allergic skin reaction. If released into watercourses in sufficient quantities may be toxic to aquatic life. None of the components are considered to be Persistent, Bioaccumulative and Toxic (PBT) or very Persistent, very Bioaccumulative (vPvB).

SECTION 3: Composition/ Information on Ingredients

3.1 Substances

Not applicable, product is a mixture.

3.2 Mixtures

Contains the following hazardous components above thresholds of concern:

Hazardous Components	Cas Number	%	Classification according to Regulation (EC) No 1272/2008	Classification according to Directive 67/548/EEC
Reaction product Bisphenol F- (epichlorhydrin)	28064-14-4	10-30%	Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411	Xi; R38-43-51/53
Reaction product bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)	25068-38-6	10-30%	Skin Irrit. 2 H315, Eye Irrit. 2 H319, Skin Sens. 1 H317, Aquatic Chronic 2 H411	Xi; R36/38-43-51/53

See section 16 for full description of R phrases and Hstatements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

Summon immediate medical assistance after contact with skin, eyes, inhalation or ingestion

Eye: Flush eyes with plenty of running water for several minutes, whilst gently holding the eyelids open. Seek medical attention if irritation persists.

Skin: Remove product and contaminated clothing and wash area with water, seek medical advice. Wash contaminated clothing before re-use.

Ingestion: Drink plenty of water, DO NOT INDUCE VOMITING. Seek medical attention immediately.

Inhalation: Remove patient to fresh air. If breathing has stopped give assisted respiration. Prevent aspiration of vomit. Turn victims head to one side. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Eye Contact: Sign/ Symptoms may include redness, tearing, and pain.

Skin Contact: Sign/ Symptoms may include localized redness, swelling, itching

Inhalation: Sign/ Symptoms may include cough, sneezing, nasal discharge, tightness of chest, headache, hoarseness and nose and throat irritation.

Ingestion: Signs/ Symptoms may include irritation of the mouth, throat, nausea, vomiting.

4.3 Indication of any immediate medical attention and special treatments needed

Symptomatic treatment as required

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

Ignition will give rise to class B Fire, in case of fire use Water sprays, Dry chemical, CO2 or Alcohol foam

5.2 Special hazards arising from the substance or mixture

Sudden reaction and fire may result if mixed with an oxidizing agent.

5.3 Advice for fire fighters

Wear Self-contained breathing apparatus, rubber boots, gloves and body suit

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all unnecessary personnel from the area. Ventilate the area if possible. Wear suitable protective clothing including chemical resistant gloves and coveralls. If vapor concentrations are high, respiratory protective equipment may be required. See section 8 for more information.

6.2 Environmental precautions

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform



Material Safety Data Sheet

the appropriate environmental authorities.

6.3 Methods and materials for containment and clearing up

Scrape up and transfer into a suitable container. Wash area with water.

6.4 References to other sections

Refer to section 5, 8 and 13 for Protective Measures and Disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing. Handle in well ventilated area. Avoid breathing vapors. Wash hands after contact.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well ventilated area. Keep away from oxidizers, heat or flames.

7.4 Specific end uses(s)

No industrial or sector specific guidance available.

SECTION 8: Exposure Controls/ Personal Protection

8.1 Control parameters

Substance Name	8 hour exposure limit	15 min exposure limit	Notes, Source
Talc (magnesium silicate), respirable dust	1 mg/m ³	—	EH40, 2011

8.2 Exposure controls

Engineering controls Adequate ventilation should be provided so that exposure limits are not exceeded.

Respiratory: Not normally required. If significant aerosols are likely to be generated a suitable respirator may be required. Suggested filter type AP2.

Hand Protection Wear suitable chemical resistant gloves. Nitrile or neoprene gloves may be suitable, but glove manufacturers' specifications should always be checked first. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Skin Protection: Avoid Skin Contact; use disposable coveralls

Eye Protection: Avoid Eye Contact; use safety goggles meeting the requirements of BS EN166 3, when handling this product

Environmental Exposure controls Take suitable measures to prevent entry into drains, sewers and watercourses.



SECTION 9: Physical/ Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Black Viscous Fluid
Odor:	Weak
Odor threshold:	No data
PH:	Neutral
Melting Point:	No data
Boiling Point/ Range:	338F
Flash Point;	>302F
Evaporation Rate:	No data
Flammability:	Not applicable
Upper/lower flammability limits:	No data
Vapor Pressure:	No data
Vapor density:	No data
Relative density:	1.8g/cm ³ at 68F
Solubility in water:	Insoluble in water
Solubility in other solvents:	Soluble in organic solvents
Partition Coefficient:	Log Kow 3-5 (estimated) (Bisphenol A/F epoxy resin)
Autoignition temperature:	Above boiling point
Decomposition temperature:	No data
Viscosity:	Thick paste
Explosive properties:	Not classified as explosive
Oxidizing properties:	Not classified as oxidizing

9.2 Other information None.

SECTION 10: Stability And Reactivity

10.1 Reactivity

Not considered to be a reactive product

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous Polymerization is not likely to occur.

10.4 Conditions to avoid

Excessive heat.

10.5 Incompatible materials

Acids - reaction accompanied by large heat release occurs when the product is mixed with acids

10.6 Hazardous decomposition products

None identified.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgments on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity	Based on consideration of the components, the mixture is not expected to be harmful by inhalation, ingestion or in contact with skin. The ATE for the mixture is expected to be >2000 mg/kg
(b) skin corrosion/irritation	Based on consideration of the components, the mixture is expected to be irritating to skin.
(c) serious eye damage/irritation	Based on consideration of the components, the mixture is expected to be irritating to eyes.
(d) respiratory/skin sensitization	The product contains the following known sensitizers: Bisphenol A epoxy resin, Persons previously sensitized to amines may develop a cross sensitization reaction to certain other amines.
(e) germ cell mutagenicity	Contains no substances identified as mutagens.
(f) carcinogenicity	Contains no substances identified as carcinogens.
(g) reproductive toxicity	Resins based on Bisphenol A did not cause adverse effects in animal tests.
(h) STOT-single exposure	Target organ toxicity is not expected with this product.
(i) STOT-repeated exposure	Target organ toxicity is not expected with this product.
(j) aspiration hazard	Not applicable.

SECTION 12: Ecological Information

This product has not been tested. Judgments on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

This product contains components which are considered to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Once cured the toxicity of the product is expected to decrease.

Data for Component: Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)

Fish Acute & Prolonged Toxicity

LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 h: 2 mg/l

Aquatic Invertebrate Acute Toxicity

EC50, Daphnia magna (Water flea), static test, 48 h, immobilization: 1.8 mg/l

Aquatic Plant Toxicity

ErC50, Scenedesmus capricornutum (fresh water algae), static test, Growth rate inhibition, 72 h: 11 mg/l

Toxicity to Micro-organisms

IC50; Bacteria, 18 h: > 42.6 mg/l **Aquatic**

Invertebrates Chronic Toxicity Value



Material Safety Data Sheet

Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, NOEC: 0.3 mg/l

12.2 Persistence and degradability

This product is not expected to be readily biodegradable.

Data for Component: Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

Biodegradation	Exposure Time	Method
10 Day Window	12 %	28 d OECD 302B
Test	Not applicable	

12.3 Bioaccumulative potential

This product is expected to have a low-moderate bioaccumulation potential.

12.4 Mobility in soil

Mobility of the uncured product is expected to be low. Cured product is expected to be immobile.

12.5 Results of PBT and vPvB assessment

None of the components are known to be PBT or vPvB.

12.6 Other adverse effects

None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

In uncured state, dispose as chemical waste in accordance with local regulations. Waste from this product may present long term environmental hazards. Thus landfill sites must be considered less acceptable than incineration.

In cured state when mixed correctly with the activator component, dispose

as solid waste Empty containers should be disposed of as chemical waste.

SECTION 14: Transport Information

General: Transport and labeling requirements will alter depending on the size of the packaging. Please refer to local transport regulations.

	ADR	IMDG	ICAO
14.1 UN Number	3077	3077	3077
14.2 UN Proper shipping name	Environmentally hazardous substance, solid, N.O.S. (epoxy resin)	Environmentally hazardous substance, solid, N.O.S. (epoxy resin)	Environmentally hazardous substance, solid, N.O.S. (epoxy resin)
14.3 Transport hazard class(es)	9	9	9

14.4 Packing group	III	III	III
14.5 Environmental hazards	Environmentally hazardous	Marine Pollutant	Environmentally hazardous
14.6 Special precautions for user	HIN 90	EmS F-A, S-F	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory Information

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

All components are listed as existing substances in Europe

All components are listed, or are exempt from listing on the TCSA Inventory

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Revision information:

Reformatted in accordance with Regulation 453/2010 and Regulation 1272/2008.

List of Abbreviations used in this SDS:

CAS	Chemical Abstracts Service
CLP	Classification, Labeling and Packaging Regulation (EC) no 1272/2008
DSD	Dangerous Substances Directive 67/548/EEC
DPD	Dangerous Preparations Directive 1999/45/EC
EC	European Community/Commission
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB	very Persistent, very Bioaccumulative

References:

ECHA Classification and Labeling inventory
ECHA database of disseminated
registration dossiers Supplier's Safety
Data Sheets

Method used for classification of mixtures:

Ingredient based approaches

R Phrases and H Statements used in Section 3

H315 Causes skin irritation.



Material Safety Data Sheet

- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.
- R36/38 Irritating to eyes and skin.
- R38 May be irritating to skin
- R43 May cause sensitization by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Training requirements for workers

No special training requirements.