

Safety Data Sheet according to Regulation (EC) 'No. 2015/830

SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier H225-0-901 Revision Date: 14/07/2020

Product Name: HI EP DECK COAT/FLEX COAT/

DECK TOPCOAT/FLEX

TOPCOAT PART B

Version Number: 10

10/12/2019

1.2 Relevant identified uses of the substance or mixture and uses

advised against

Hardener for 2 components coatings - Industrial use. Advised against: Please see

Supersedes Date:

Technical Data Sheet.

1.3 Details of the supplier of the safety data sheet

Importer: None

Manufacturer: Hummervoll Industribelegg A/S

Sanddalsringen 3 N-5225 NESTTUN

Norway

Regulatory / Technical Information:

+47 55 92 27 00 +47 55 92 27 10 (Fax) http://www.hummervoll.no

Datasheet Produced by: Chen, Shi - ehs@stoncor.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Corrosive to the respiratory tract EUH071
Acute Toxicity, Oral, category 4 H302
Skin Corrosion, category 1B H314-1B
Skin Sensitizer, category 1 H317
Acute Toxicity, Inhalation, category 4 H332
Reproductive Toxicity, category 2 H361d
Hazardous to the aquatic environment, Chronic, category 3 H412

2.2 Label elements

Symbol(s) of Product







Signal Word

Danger

Named Chemicals on Label

salicylic acid, Benzyl alcohol, benzene-1,3-dimethanamine, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine, phenol, styrenated, phenol, methylstyrenated

HAZARD STATEMENTS

EUH071	Corrosive to the respiratory tract.
H302	Harmful if swallowed.
H314-1B	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H361d	Suspected of damaging the unborn child.
H412	Harmful to aquatic life with long lasting effects.
	H314-1B H317 H332 H361d

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

CAS-No.	EINEC No.	Name According to EEC	<u>%</u>
100-51-6	202-859-9	Benzyl alcohol	25 - <50
2855-13-2	220-666-8	3-Aminomethyl-3,5,5- trimethylcyclohexylamine	10 - <25
1477-55-0	216-032-5	benzene-1,3-dimethanamine	10 - <25
68512-30-1	270-966-8	phenol, methylstyrenated	10 - <25
69-72-7	200-712-3	salicylic acid	2.5 - <10
61788-44-1	262-975-0	phenol, styrenated	2.5 - <10

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
100-51-6	01-2119492630-38	GHS07	H302-319-332	
2855-13-2	01-2119514687-32	GHS05-GHS07	H302-312-314-317-412	

1477-55-0 01-2119480150-50 GHS05-GHS07 H302-314-317-332-412 68512-30-1 01-2119555274-38 GHS07 H315-317-412 69-72-7 01-2119486984-17 GHS05-GHS07-GHS08 H302-318-361d GHS07-GHS09 61788-44-1 01-2119980970-27 H315-317-411

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: Show this safety data sheet to the doctor in attendance.

AFTER INHALATION: Move to fresh air. Provide fresh air, rest and warmth. Call a physician immediately. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position. **AFTER SKIN CONTACT:** Use a mild soap if available. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Do not use solvent or thinners to clean skin.

AFTER EYE CONTACT: Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

AFTER INGESTION: If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns. May cause sensitization by skin contact. Harmful by inhalation and if swallowed. Causes serious eye damage. Suspected of damaging the unborn child.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11. When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Heating or fire conditions liberates toxic gas. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Keep containers and surroundings cool with water spray.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Clean with detergents. Avoid solvents.

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Use only in area provided with appropriate exhaust ventilation. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Open drum carefully as content may be under pressure. Do not breathe vapours or spray mist. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Apply technical measures to comply with the occupational exposure limits (see section 8).

Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid heat, sparks, flames and other ignition sources.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store away from: oxidising materials, acids, and alkalis. Store in upright position only. Storage of corrosive material.

LTEL ppm

STEL ppm

STEL mg/m3

LTEL mg/m3

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (EU)

Name	<u>CAS-No.</u>
Benzyl alcohol	100-51-6
3-Aminomethyl-3,5,5- trimethylcyclohexylamine	2855-13-2
benzene-1,3-dimethanamine	1477-55-0
phonol mothyletyropatod	69512 30 1

benzene-1,3-dimethanamine 1477-55-0 phenol, methylstyrenated 68512-30-1 salicylic acid 69-72-7 phenol, styrenated 61788-44-1

Name	CAS-No.	OEL Note
Benzyl alcohol	100-51-6	
3-Aminomethyl-3,5,5- trimethylcyclohexylamine	2855-13-2	
benzene-1,3-dimethanamine	1477-55-0	
phenol, methylstyrenated	68512-30-1	
salicylic acid	69-72-7	
phenol, styrenated	61788-44-1	

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Use compressed air or fresh air breathing apparatus in closed compartments. Wear respiratory protection with combination filter (dust and gas filter, EN 14387:2004+A1:2008) during spraying operations: Gas

filter type A2 (organic substances). Dust filter P3 (for fine dust).

EYE PROTECTION: Safety glasses with side-shields conforming to EN 166.

HAND PROTECTION: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin. Protective gloves complying with EN 374: Butyl rubber. Nitril rubber. Recommended glove material for mixed product: Protective gloves complying with EN 374: Butyl rubber. Nitril rubber.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location. **ENGINEERING CONTROLS:** Ensure adequate ventilation, especially in confined areas.

Chemical Name:

Benzyl alcohol

EC No.: CAS-No.: 202-859-9 100-51-6

DNELs - Derived no effect level

		Workers			Workers Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral		Not required				20 mg/kg bw/	5 mg/kg bw/	4 mg/kg bw/day
						day	day	
Inhalation		110 mg/m ³		22 mg/m3		27 mg/m3	_	5.4 mg/m3
Dermal		40 mg/kg bw/		8 mg/kg bw/day		20 mg/kg bw/ day		4 mg/kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1 mg/L
Fresh water sediments	5.27 mg/kg wwt
Marine water	0.1 mg/L
Marine sediments	0.527 mg/kg wwt
Food chain	
Microorganisms in sewage treatment	39 mg/L
soil (agricultural)	0.456 mg/kg wwt
Air	

Chemical Name:

3-Aminomethyl-3,5,5-trimethylcyclohexylamine

EC No.: CAS-No.: 220-666-8 2855-13-2

DNELs - Derived no effect level

		Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	
Oral	Not required						0.526 mg/kg bw/ day		
Inhalation	20.1 mg/m3	20.1 mg/m3							
Dermal								0.526 mg/kg bodyweight/day	

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.06 mg/L
Fresh water sediments	5.784 mg/kg
Marine water	0.006 mg/L
Marine sediments	0.578 mg/kg (dry weight)
Food chain	
Microorganisms in sewage treatment	3.18 mg/L
soil (agricultural)	1.121 mg/kg (dry weight)
Air	

Chemical Name:

benzene-1,3-dimethanamine

EC No.: CAS-No.: 216-032-5 1477-55-0

DNELs - Derived no effect level

		Wo	orkers		Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required							
Inhalation			0.2 mg/m ³	1.2 mg/m ³				
Dermal				0.33 mg/kg bw/				
				day				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.094 mg/L
Fresh water sediments	0.43 mg/kg
Marine water	0.009 mg/L
Marine sediments	0.043 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/L
soil (agricultural)	0.045 mg/kg
Air	

Chemical Name:

phenol, methylstyrenated

EC No.: CAS-No.: 270-966-8 68512-30-1

DNELs - Derived no effect level

	Workers			Consumers				
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required				· -	·	0.2 mg/kg bw/ day	
Inhalation				1.4 mg/m3				0.35 mg/m3
Dermal				3.5 mg/kg bw/				1.7 mg/kg bw/
				day				day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	14 μg/L
Fresh water sediments	1064 mg/kg dw
Marine water	1.4 μg/L
Marine sediments	106 mg/kg dw
Food chain	
Microorganisms in sewage treatment	2.4 mg/L
soil (agricultural)	212 mg/kg dw
Air	

Chemical Name:

salicylic acid

EC No.: CAS-No.: 200-712-3 69-72-7

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral		Not required			4 mg/kg bw/	4 mg/kg bw/		1 mg/kg bw/day
					day	day		
Inhalation			5 mg/m3	5 mg/m3			0.0002 mg/L	4 mg/m3
Dermal				2.3 mg/kg bw/			-	1 mg/kg bw/day
				dav				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.20 mg/L
Fresh water sediments	1.42 mg/kg dw
Marine water	0.020 mg/L
Marine sediments	0.142 mg/kg dw
Food chain	
Microorganisms in sewage treatment	162 mg/L
soil (agricultural)	0.166 mg/kg dw
Air	

Chemical Name:

phenol, styrenated

EC No.: CAS-No.: 262-975-0 61788-44-1

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral		Not required						
Inhalation				1.21 mg/m3				
Dermal			2.87 mg/kg bw/					
				day				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	11.5 μg/L
Fresh water sediments	1.564 mg/kg dw
Marine water	1.15 μg/L
Marine sediments	0.156 mg/kg dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	0.305 mg/kg dw
Air	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Pale yellow

Physical State Liquid
Odor Amine

Odor threshold Not determined

pH 11 - 12

Melting point / freezing point (°C) Not determined

Boiling point/range (°C) Not determined

Flash Point, (°C)

Evaporation rate Not determined Flammability (solid, gas) Not determined

Upper/lower flammability or explosive

limits

Not determined

Vapour PressureNot determinedVapour densityNot determinedRelative densityNot determined

Solubility in / Miscibility with water Negligible

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

Viscosity

83 - 103 KU

Explosive properties

Not determined

Not determined

Not determined

9.2 Other information

VOC Content g/l: 0.00

Specific Gravity (g/cm3) 1.07

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No reactivity hazards known under normal storage and use conditions.

10.4 Conditions to avoid

Avoid heat, sparks, flames and other ignition sources.

10.5 Incompatible materials

Keep away from strong oxidising agents and strongly acid or alkaline materials.

10.6 Hazardous decomposition products

In case of fire or hot work operations, **hazardous decomposition products** may be formed such as:Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), aliphatic amines, aldehydes, cyanides.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information available on the product itself as the product is not tested.

Inhalation LC50: No information available on the product itself as the product is not tested.

Irritation: Vapour/spray mist may irritate respiratory system and lungs.

Corrosivity: Corrosive to eyes and skin.

Sensitization:

May cause an allergic skin reaction.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: This product contains one or more substances classified as toxic for reproduction.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
100-51-6	Benzyl alcohol	1620 mg/kg rat	2980 mg/kg, rabbit	No information	No information	>4.178 mg/L (4h/ rat, mist)
2855-13-2	3-Aminomethyl-3,5,5- trimethylcyclohexylamine	1030 mg/kg (oral- rat)	1840 mg/kg (dermal-rabbit)	No information	No information	No information
1477-55-0	benzene-1,3-dimethanamine	1514 mg/kg (oral)	>2000 mg/kg	No information	No information	No information
68512-30-1	phenol, methylstyrenated	>2000 mg/kg (oral, rat)	>2000 mg/kg (dermal, rat)	No information	No information	4.9 mg/L (inhalation, aerosol, rat)
69-72-7	salicylic acid	891 mg/kg (oral- rat)	>2000 mg/kg (dermal-rat)	900 mg/m³ (1 hr-inh-rat)	No information	No information
61788-44-1	phenol, styrenated	>2000 mg/kg (oral, rat)	>2000 mg/kg (dermal, rat)	No information	No information	No information

Additional Information:

Corrosive - causes irreversible eye damage. Inhalation of vapour or mist can cause headache, nausea, irritation of nose, throat, and lungs. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Corrosive to skin.

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

assessment:

12.6 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
100-51-6	Benzyl alcohol	230 mg/L (Daphnia Magna)	770 mg/L (EgC50, Selenastrum	400 mg/L (fish)

37 mg/L (EC50, 3-Aminomethyl-3,5,5-23 mg/L (Daphnia 2855-13-2 Desmodesmus 110 mg/L (Leuciscus idus) trimethylcyclohexylamine magna) subspicatus) 32.1 mg/L (ErC50, 15.2 mg/L (Daphnia 1477-55-0 benzene-1,3-dimethanamine Selenastrum 87.6 mg/L (Oryzias latipes) magna) capricornutum) 14 - 51 mg/L (Daphnia) 15 mg/L (Algae) (OECD 25.8 mg/L (Fish) (OECD TG 68512-30-1 phenol, methylstyrenated (OECD TG 202) TG 201) >100 mg/L (EC50, 870 mg/L (Daphnia 1370 mg/L (Pimephales 69-72-7 salicylic acid Desmodesmus magna) promelas) subspicatus) 1 - 10 mg/L (EL50, 3.14 mg/L (EL50, Algae) 14.8 mg/L (Fish) 61788-44-1 phenol, styrenated Daphnia)

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

European Waste Code: 08 01 11*
Packaging Waste Code: 15 01 10

SECTION 14: Transport Information

14.1 UN number UN2735

14.2 UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine, benzene-1,3-

dimethanamine)

Technical name Isophoronediamine, benzene-1,3-dimethanamine

14.3 Transport hazard class(es)

Subsidiary shipping hazard Not applicable

14.4 Packing group

 14.5
 Environmental hazards
 Marine pollutant: No

 14.6
 Special precautions for user
 Not applicable

EmS-No.:

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

F-A, S-B

SECTION 15: Regulatory Information

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

National Regulations:

Denmark Product Registration Number: Not available

Danish MAL Code: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number: Not available

Norway Product Registration Number: P-94456

Germany WGK Class: 3

Covered by Directive 2012/18/EC (Seveso III): Not applicable

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:

Entry 3

Annex XIV - Authorisation List:

CAS-No. Name According to EEC

Not Applicable

SVHC - Substances of very high concern (Candidate List):

CAS-No. Name According to EEC

Not Applicable

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Changes have been made to Section 2 of the Safety Data Sheet (SDS). Please refer to the Hazard Identification information in Section 2 of this SDS. Changes have been made to Section 3 of the Safety Data Sheet (SDS). Please refer to the Composition / Information on Ingredients in Section 3 of this SDS. Changes have been made to Section 4 of the Safety Data Sheet (SDS). Please refer to the First Aid Measures information in Section 4 of this SDS. Changes have been made to Section 11 of the Safety Data Sheet (SDS). Please refer to the Toxicological Information in Section 11 of this SDS. Changes have been made to Section 12 of the Safety Data Sheet (SDS). Please refer to the Ecological Information in Section 12 of this SDS.

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark; European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP); EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration

IC50 Half maximal inhibitory concentration

PBT Persistent bioaccumulative toxic chemical

vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container RTI Respiratory Tract Irritation

NE Narcotic Effects

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.