

SAFETY DATA SHEET in accordance with REACH (1907/2006/EC, as amended by 2020/878/EU)						
Revision date: 15 Febru	uary 2024	Date of previ	ious issue:	4 November 2023	<b>SDS No.</b> 472B-2	2
SECTION 1: IDENTIFICA	TION OF THE	E SUBSTANCE/M	IIXTURE AN	D OF THE COMPANY	UNDERTAKING	
1.1. Product identifier						
ARC S5 (Part B)						
Unique Formula Identifie	r (UFI): 3X	25-7V76-39FK-75	5S			
1.2. Relevant identified us	ses of the su	Ibstance or mixtu	ure and use	s advised against		
Relevant identified uses:		d with ARC S5 (Pa perature applicatio		e as a thin film coating o	on properly prepared surfa	aces for
Uses advised against:	No inform	nation available				
Reason why uses advise	d against:	Not applicable				
1.3. Details of the supplie	er of the safe	ty data sheet				
Company:			Supplie	er:		
A.W. CHESTERTON COM 860 Salem Street	IPANY					
Groveland, MA 01834-150						
Tel. +1 978-469-6446 Fa		39-6785				
(Mon Fri. 8:30 - 5:00 PM SDS requests: <u>www.cheste</u>						
E-mail (SDS questions): Pr		chesterton.com				
E-mail: <u>customer.service@</u>						
EU: Chesterton Internation	ol Cmh∐ Am	Lonzonflock 23				
D85737 Ismaning, Germar						
1.4. Emergency telephon	-					
24 hours per day, 7 days p						
Call Infotrac: +1 352-323-3						
SECTION 2: HAZARDS II	DENTIFICATI	ION				
2.1. Classification of the	substance or	r mixture				
2.1.1. Classification acco	rding to Reg	ulation (EC) No 1	1272/2008 [C	LP]		
Acute toxicity, Category 4,	H302/312/33	2				
Skin corrosion, Category 1						
Serious eye damage, Cate						
Skin sensitization, Categor		posure. Category	3. H335			
Specific target ordan toxici						
Specific target organ toxicit Hazardous to the aquatic e						
	tion					
Hazardous to the aquatic e		ONS 2.2 and 16.				
Hazardous to the aquatic e 2.1.2. Additional informat		ONS 2.2 and 16.				
Hazardous to the aquatic e <b>2.1.2. Additional informat</b> For full text of H-statement	s: see SECTI	-	[CLP]			
Hazardous to the aquatic e 2.1.2. Additional informat For full text of H-statement 2.2. Label elements	s: see SECTI	-	[CLP]			

Signal word:

Danger

Hazard statements:	H302/312/332 H314 H317 H335 H412	Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.
Precautionary statements:	P303/361/353	Do not breathe mist/vapours. Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/clothing and eye/face protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed.
Supplemental information:	None	

## 2.3. Other hazards

The safety and health hazards are detailed separately for Part A and Part B. The final cured material is considered nonhazardous. Upon machining, refer to the precautions in the safety data sheets for Part A and Part B.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS					
3.2. Mixtures					
Hazardous Ingredients <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP Classification	SCL, M-factor, ATE
1,2-Cyclohexanediamine	85-95	694-83-7 211-776-7	NA	Acute Tox. 4, H302/312/332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	ATE (oral): 1,170 mg/kg ATE (dermal): 1,870 mg/kg ATE (inhalation, mist): 1.5 mg/l
4,4'-Methylenebis(cyclohexylamine)	1-7	1761-71-3 217-168-8	NA	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373 (liver, muscles)	ATE (oral): 625 mg/kg ATE (dermal): 2,110 mg/kg
3-Aminomethyl-3,5,5- trimethylcyclohexylamine	1-7	2855-13-2 220-666-8	NA	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 3, H412	Skin Sens. 1A, H317: C ≥ 0.001 % ATE (oral): 1,030 mg/kg ATE (dermal): > 2,000 mg/kg 43275 mg/l
Diethylmethylbenzenediamine	1-<2.5	68479-98-1 270-877-4	NA	Acute Tox. 4, H302/312 Eye Irrit. 2, H319 STOT RE 2, H373 (pancreas) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M-factor acute/chronic = 1 ATE (oral): 485 mg/kg ATE (dermal): 1,100 mg/kg
For full text of H-statements: see SEC	TION 16.				
<sup>1</sup> Classified according to: 1272/2008/EC, F	REACH				

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# SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

**Inhalation:** Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

- **Skin contact:** Flood area with water while removing contaminated clothing. Wash clothing before reuse. Contact physician immediately.
- **Eye contact:** Flush eyes for at least 15 minutes with large amounts of water. Remove contact lenses, if present and easy to do. Continue rinsing. Contact physician immediately.
- **Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Contact physician immediately.
- **Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. Do not breathe mist/vapours. See section 8.2.2 for recommendations on personal protective equipment.

#### 4.2. Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. High vapor concentrations and mist can cause severe eye and respiratory tract irritation. May cause skin sensitization as evidenced by rashes or hives. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

#### SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical, foam, water spray

Unsuitable extinguishing media: Water jets

#### 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: May generate: ammonia gas, toxic nitrogen oxide gases, carbon monoxide. Burning produces noxious and toxic fumes.

Other hazards: Vapors may travel considerable distance to a source of ignition and flash back.

## 5.3. Advice for firefighters

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus and complete fire service protective equipment.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Provide adequate ventilation. Avoid skin contact. Utilize exposure controls and personal protection as specified in Section 8. Keep away from sources of ignition. If removal of ignition sources is not possible, then flush material away with water.

#### **6.2. Environmental Precautions**

Keep out of sewers, streams and waterways.

## 6.3. Methods and material for containment and cleaning up

Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal.

#### 6.4. Reference to other sections

Refer to section 13 for disposal advice.

## SECTION 7: HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

Do not breathe vapours/spray. Use only outdoors or in a well-ventilated area. Utilize exposure controls and personal protection as specified in Section 8. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Keep away from flames and hot surfaces. Do not contaminate with sodium nitrite or other nitrosating agents, which could cause the formation of cancercausing nitrosamine. Remove contaminated clothing immediately. Wash clothing before reuse. Contaminated leather including shoes cannot be decontaminated and should be discarded. Avoid creating and breathing dust during removal, drilling, grinding, sawing or sanding.

## 7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dry and well-ventilated area. Keep from freezing. Do not store near food or feed.

# 7.3. Specific end use(s)

## No special precautions.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1. Control parameters

# Occupational exposure limit values

Ingredients	ACGIH	UK WEL <sup>2</sup>		
	ppm	mg/m³	ppm	mg/m³
1,2-Cyclohexanediamine	N/A	N/A	N/A	N/A
4,4'-Methylenebis(cyclohexylamine)	N/A	N/A	N/A	N/A
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	N/A	N/A	N/A	N/A
Diethylmethylbenzenediamine	N/A	N/A	N/A	N/A

<sup>1</sup> American Conference of Governmental Industrial Hygienists threshold limit values

<sup>2</sup> EH40 Workplace exposure limits, Health & Safety Executive

## **Biological limit values**

No biological exposure limits noted for the ingredient(s).

# Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:

# Workers (Source: GESTIS)

Substance	Route of exposure	Potential health effects	DNEL
1,2-Cyclohexanediamine	Inhalation	Chronic effects, local	0.27 mg/m <sup>3</sup>
4,4'-Methylenebis(cyclohexylamine)	Inhalation	Chronic effects, systemic	0.13 mg/m <sup>3</sup>
3-Aminomethyl-3,5,5-	Inhalation	Chronic effects, local	0.073 mg/m <sup>3</sup>
trimethylcyclohexylamine			-
Diethylmethylbenzenediamine	Inhalation	Chronic effects, systemic	0.13 mg/m <sup>3</sup>

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:

Not available

# 8.2. Exposure controls

## 8.2.1. Engineering measures

Use only in well-ventilated areas. If necessary, provide local exhaust. If it is necessary to alter the final cured product such that dust may be generated, use adequate dust extraction or damp down.

# 8.2.2. Individual protection measures

Respiratory protection:	Use positive pressure, supplied-air respirators if there is a potential for uncontrolled release, if exposure levels are unknown, or under circumstances where air-purifying respirators may not provide adequate protection.
Protective gloves:	Chemical resistant gloves (e.g., nitrile rubber, butyl rubber, neoprene, PVC)
Eye and face protection:	Full face shield with goggles underneath.
Other:	Impervious clothing as necessary to prevent skin contact.
8.2.3. Environmental expo	osure controls

Refer to sections 6 and 12.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Colour	viscous liquid light brown	pH Kinematic viscosity	not applicable 10.3 cSt @ 25°C
Odour	amine	Solubility in water	miscible
Odour threshold	not determined	Partition coefficient n-octanol/water (log value)	not applicable
Boiling point or range	191°C (376°F)	Vapour pressure @ 20°C	51.6 Pa @ 20°C
Melting point/freezing point	not determined	Density and/or relative density	0.97 kg/l
% Volatile (by volume)	none	Vapour density (air=1)	> 1
Flammability	not determined	Rate of evaporation (ether=1)	< 1
Lower/upper flammability or explosion limits	not determined	% Aromatics by weight	none
Flash point	70°C (158°F)	Particle characteristics	not applicable
Method	component data	Explosive properties	not determined
Autoignition temperature	340°C (644°F)	Oxidising properties	not determined
Decomposition temperature	>300°C (>572°F)		
9.2. Other information			

None

#### SECTION 10: STABILITY AND REACTIVITY

#### 10.1. Reactivity

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

#### 10.4. Conditions to avoid

Open flames, heat, sparks and red hot surfaces.

#### 10.5. Incompatible materials

Strong acids and strong oxidizers like liquid Chlorine and concentrated Oxygen. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Do not contaminate with sodium nitrite or other nitrosating agents.

#### 10.6. Hazardous decomposition products

Nitric acid, NOx, Ammonia, Carbon Monoxide, Carbon Dioxide, nitrosamines and other toxic fumes.

# SECTION 11: TOXICOLOGICAL INFORMATION

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation, skin and eye contact. Personnel with pre-existing allergies and skin and eye disorders Primary route of exposure under normal use: may be aggravated by exposure.

#### Acute toxicity -

Oral:

Harmful if swallowed. ATE-mix = 1053.7 mg/kg. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Substance	Test	Result
1,2-Cyclohexanediamine	LD50, rat	1,170 mg/kg
4,4'-Methylenebis(cyclohexylamine)	LD50, rat	625 mg/kg
3-Aminomethyl-3,5,5-	LD50, rat	1,030 mg/kg
trimethylcyclohexylamine		
Diethylmethylbenzenediamine	LD50, rat	485 mg/kg

Dermal:

Substance Test Result 1,2-Cyclohexanediamine LD50, rat 1,870 mg/kg 4,4'-Methylenebis(cyclohexylamine) LD50, rabbit 2,110 mg/kg 3-Aminomethyl-3,5,5-LD50, rabbit > 2,000 mg/kg trimethylcyclohexylamine Diethylmethylbenzenediamine cATpE 1,100 mg/kg

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Harmful in contact with skin. ATE-mix = 1814.3 mg/kg.

	Substance	Test	Result
	1,2-Cyclohexanediamine	LCLo, rat, 4 h	3.2 mg/l (mist/vapor)
	1,2-Cyclohexanediamine	LC50, rat, 4 h	1.225 (mist/vapor, analytical, similar material)
	3-Aminomethyl-3,5,5- trimethylcyclohexylamine	LC50, rat, 4 h	> 5.01 mg/l (mist, analytical)
	Diethylmethylbenzenediamine	LC50, rat, 1 h	> 2.45 mg/l (mist)
Skin corrosion/irritation:	Causes severe burns.		
	Substance	Test	Result
	3-Aminomethyl-3,5,5- trimethylcyclohexylamine	Skin irritation, rabbit	Corrosive
Serious eye damage/ irritation:	Causes serious eye damage.		
	Substance	Test	Result
	1,2-Cyclohexanediamine	Eye irritation, rabbit	Corrosive
	3-Aminomethyl-3,5,5-	Eye irritation, rabbit	Corrosive
	trimethylcyclohexylamine	(ÓECD 405)	
Respiratory or skin sensitisation:	trimethylcyclohexylamine May cause skin sensitization as evide		
	May cause skin sensitization as evide	nced by rashes or hives.	Result
	May cause skin sensitization as evide	nced by rashes or hives.	Result Sensitizing
	May cause skin sensitization as evide Substance 3-Aminomethyl-3,5,5-	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406)	Sensitizing
sensitisation:	May cause skin sensitization as evide Substance 3-Aminomethyl-3,5,5- trimethylcyclohexylamine 1,2-Cyclohexanediamine, 3-Aminome	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406) thyl-3,5,5-trimethylcyclohexylar as listed by the International A	Sensitizing nine: based on available da
sensitisation: Germ cell mutagenicity:	May cause skin sensitization as evide Substance 3-Aminomethyl-3,5,5- trimethylcyclohexylamine 1,2-Cyclohexanediamine, 3-Aminome the classification criteria are not met. This product contains no carcinogens	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406) thyl-3,5,5-trimethylcyclohexylar as listed by the International A gency (ECHA).	Sensitizing nine: based on available da gency for Research on Cano
sensitisation: Germ cell mutagenicity: Carcinogenicity:	May cause skin sensitization as evide <u>Substance</u> <u>3-Aminomethyl-3,5,5-</u> <u>trimethylcyclohexylamine</u> 1,2-Cyclohexanediamine, 3-Aminome the classification criteria are not met. This product contains no carcinogens (IARC) or the European Chemicals Age	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406) thyl-3,5,5-trimethylcyclohexylar as listed by the International A gency (ECHA).	Sensitizing nine: based on available da gency for Research on Cano
sensitisation: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity:	May cause skin sensitization as evide Substance 3-Aminomethyl-3,5,5- trimethylcyclohexylamine 1,2-Cyclohexanediamine, 3-Aminome the classification criteria are not met. This product contains no carcinogens (IARC) or the European Chemicals Ag 3-Aminomethyl-3,5,5-trimethylcyclohe	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406) thyl-3,5,5-trimethylcyclohexylar as listed by the International A gency (ECHA). exylamine: not expected to cause may cause damage to organs t ). Diethylmethylbenzenediamine, 3-Am	Sensitizing nine: based on available da gency for Research on Can the toxicity. hrough prolonged or repeat the: NOEL, pancreas , 2 years inomethyl-3,5,5-
sensitisation: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT – single exposure: STOT – repeated exposure:	May cause skin sensitization as evide <u>Substance</u> <u>3-Aminomethyl-3,5,5-</u> <u>trimethylcyclohexylamine</u> 1,2-Cyclohexanediamine, 3-Aminome the classification criteria are not met. This product contains no carcinogens (IARC) or the European Chemicals Ag 3-Aminomethyl-3,5,5-trimethylcyclohe May cause respiratory irritation. 4,4'-Methylenebis(cyclohexylamine) : exposure if swallowed (liver, muscles) rat, male - 35 ppm; female - 70 ppm.	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406) thyl-3,5,5-trimethylcyclohexylar as listed by the International A gency (ECHA). exylamine: not expected to cause may cause damage to organs t ). Diethylmethylbenzenediamine, 3-Am	Sensitizing nine: based on available da gency for Research on Can the toxicity. hrough prolonged or repeat the: NOEL, pancreas , 2 years inomethyl-3,5,5-
sensitisation: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT – single exposure: STOT – repeated	May cause skin sensitization as evide Substance 3-Aminomethyl-3,5,5- trimethylcyclohexylamine 1,2-Cyclohexanediamine, 3-Aminome the classification criteria are not met. This product contains no carcinogens (IARC) or the European Chemicals Ag 3-Aminomethyl-3,5,5-trimethylcyclohe May cause respiratory irritation. 4,4'-Methylenebis(cyclohexylamine) : exposure if swallowed (liver, muscles) rat, male - 35 ppm; female - 70 ppm. trimethylcyclohexylamine: not expected exposure. Not classified due to lack of data.	nced by rashes or hives. Test Skin sensitization, guinea pig (OECD 406) thyl-3,5,5-trimethylcyclohexylar as listed by the International A gency (ECHA). exylamine: not expected to cause may cause damage to organs t ). Diethylmethylbenzenediamine, 3-Am	Sensitizing nine: based on available da gency for Research on Can the toxicity. hrough prolonged or repeat the: NOEL, pancreas , 2 years inomethyl-3,5,5-

# SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

## 12.1. Toxicity

Harmful to aquatic life with long lasting effects. Diethylmethylbenzenediamine: 48 h EC50 (for daphnia) = 0.5 mg/l; 48 h LC50 (Leuciscus idus) = 194 mg/l.

## 12.2. Persistence and degradability

Unreacted components (Parts A and B), improperly released to the environment, can cause ground and water pollution. 1,2-Cyclohexanediamine: readily biodegradable (OECD 301D, 17 days). 4,4'-Methylenebis(cyclohexylamine), Diethylmethylbenzenediamine: expected to be resistant to biodegradation.

## 12.3. Bioaccumulative potential

4,4'-Methylenebis(cyclohexylamine) : low potential for bioaccumulation (bioconcentration factor < 100, estimated). 1,2-Cyclohexanediamine: bioconcentration in aquatic organisms is not expected to be significant (log Kow < -0.9, OECD 107).

# 12.4. Mobility in soil

Liquid. Miscible in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

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12.5. Results of PBT and vPvB assessment				
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.				
12.6. Endocrine disrupting properties				
None known				
12.7. Other adverse effects				
None known				
SECTION 13: DISPOSAL CONSIDERATIONS				
13.1. Waste treatment methods				
Combine resin and curative. The final cured material is considered nonhazardous. Unreacted components are a special waste. Incinerate waste product when in liquid form with a properly licensed facility. The unhardened product is classified as a hazardou waste according to 2008/98/EC. Check local, state and national/federal regulations and comply with the most stringent requirement.				
SECTION 14: TRANSPORT INFORMATION				
14.1. UN number or ID number				
ADR/RID/ADN/IMDG/ICAO: UN2735 14.2. UN proper shipping name				
ADR/RID/ADN/IMDG/ICAO: AMINES, LIQUID, CORROSIVE, N.O.S.				
(1,2-DIAMINOCYCLOHEXANE /4,4'-METHYLENEBISCYCLOHEXANAMINE,METHYLIMIDAZOLE,				
14.3. Transport hazard class(es)				
ADR/RID/ADN/IMDG/ICAO: 8 14.4. Packing group				
ADR/RID/ADN/IMDG/ICAO:				
14.5. Environmental hazards				
NO ENVIRONMENTAL HAZARDS				
14.6. Special precautions for user NO SPECIAL PRECAUTIONS FOR USER				
14.7. Maritime transport in bulk according to IMO instruments				
NOT APPLICABLE				
14.8. Other information				
IMDG: EMS F-A, S-B, IMDG SEGREGATION GROUP 18-ALKALIS ADR: CLASSIFICATION CODE C7, TUNNEL RESTRICTION CODE (E)				
MAY BE SHIPPED AS A LIMITED QUANTITY IN PACKAGING HAVING A RATED CAPACITY GROSS WEIGHT OF 30KG (66				
LBS.) OR LESS AND IN INNER PACKAGES NOT OVER 1 LITER (ADR 3.4.1, ADR 3.4.2)				
SECTION 15: REGULATORY INFORMATION				
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture				
15.1.1. EU regulations				
Authorisations under Title VII: Not applicable				
Restrictions under Title VIII: None				
<b>Other EU regulations:</b> Directive 94/33/EC on the protection of young people at work.				
15.1.2. National regulations				
National implementation of the EC Directive referred to in section 15.1.1.				
15.2. Chemical safety assessment				
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.				

Date: 15 February 2024

SECTION 16: OT Abbreviations and acronyms:	HER INFORMATION ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road ATE: Acute Toxicity Estimate BCF: Bioconcentration Factor cATpE: Converted Acute Toxicity point Estimate CLP: Classification Labelling Packaging Regulation (1272/2008/EC) ICAO: International Civil Aviation Organization IMDC: International Maritime Dangerous Goods LC50: Lethal Dose to 50% of a test population LD50: Lethal Dose to 50% of a test population LD50: Lethal Dose to 50% of a test population LD51: Lethal Dose to 50% of a test population NOEL: No Observed Effect Level N/A: Not Applicable NA: Not Available NOEC: No Observed Effect Level OECD: Organization for Economic Co-operation and Development PBT: Persistent, Bioaccumulative and Toxic substance (Q)SAR: Quantitative Structure-Activity Relationship REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC) REL: Recommended Exposure Limit SID: Regulations concerning the International Carriage of Dangerous Goods by Rail SCL: Specific Concentration Limit SDS: Safety Data Sheet STEL: Short Term Exposure Limit STOT RE: Specific Target Organ Toxicity, Repeated Exposure STOT SE: Specific Target Organ Toxicity, Single Exposure STOT SE: Specific Ta
	vPvB: very Persistent and very Bioaccumulative substance WEL: Workplace Exposure Limit
	Other abbreviations and acronyms can be looked up at www.wikipedia.org.
Key literature ref and sources for	• • • •
Procedure used	o derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP]:
Classification	Classification procedure

Classification	Classification procedure
Acute Tox. 4, H302/312/332	Calculation method
Skin Corr. 1B, H314 Calculation method	
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method
H312: Harmfu H314: Causes H317: May ca H318: Causes H319: Causes H332: Harmfu H335: May ca H373: May ca H373: May ca	Il if swallowed. Il in contact with skin. Is severe skin burns and eye damage. Iuse an allergic skin reaction. Is serious eye damage. Is serious eye irritation. Il if inhaled. Il if inhaled. Iuse respiratory irritation. Iuse damage to organs through prolonged or repeated exposure. Il to aquatic life with long lasting effects.

Further information: None

Changes to the SDS in this revision: Section 14.8.

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.

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