SAFETY DATA SHEET	
according to Regulation (EC) No.	1907/2006



Ardrox 6092		
Version: 4.1	Revision Date 02.01.2012	Print Date 03.01.2012
1. Identification of the substa	ince/mixture and of the company/un	ndertaking
1.1 Product identifier		
Trade name	: Ardrox 6092	
1.2 Relevant identified uses of the	he substance or mixture and uses advis	sed against
Use of the Sub-	: Cleaning agent	
stance/Mixture Recommended restrictions on use	: None known.	
1.3 Details of the supplier of the	safety data sheet	
Company Telephone Telefax	 Chemetall Ltd Denbigh Road Bletchley Milton Keynes MK 01908 649333 01908 373939 	í1 1PB
Contact person product safet Telephone E-mail address	y : +49(0)6971652832 : msds.de@chemetall.com	
1.4 Emergency telephone numb	er	
Emergency telephone number	: 01908 649333	
2. Hazards identification 2.1 Classification of the substan Classification (REGULATIO Skin corrosion, Category 1B Classification (67/548/EEC, Corrosive 2.2 Label elements Labelling (REGULATION (E Hazard pictograms	N (EC) No 1272/2008) H314: Causes severe skir 1999/45/EC) R34: Causes burns.	n burns and eye damage.
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		Revision Date	02.01.2012	Print Date 03.01.2
Signal word	:	Danger		
Hazard statements	:	H314	Causes severe ski	n burns and eye damage.
Precautionary statements	:	Prevention: P260 P262 P280	pours/ spray. Do not get in eyes,	st/ fume/ gas/ mist/ va- on skin, or on clothing. oves/ protective clothing/ e protection.
		Response: P301 + P330 + P303 + P361 +	NOT induce vomitin P353 IF ON SKIN (c	'ED: rinse mouth. Do ng. or hair): Remove/ Take contaminated clothing.
		P305 + P351 +	Rinse skin with wat P338 IF IN EYES: R ter for several minu	
		P308 P315 Disposal: P501	IF exposed or conc Get immediate med	cerned: dical advice/ attention.
		F301	Dispose of content proved waste dispo	s/ container to an ap- osal plant.
Labelling according to EC Hazard pictograms	Dire :		proved waste dispo	
	Dire :		proved waste dispo	
Hazard pictograms	Dire :	ectives (1999/45)	/EC) Causes burns. Do not breathe va Avoid contact with In case of contact	pours, aerosols.
Hazard pictograms R-phrase(s)	Dire :	ctives (1999/45)	/EC) Causes burns. Do not breathe va Avoid contact with In case of contact ately with plenty o advice. Wear suitable prot	pours, aerosols. skin and eyes. with eyes, rinse immed water and seek medic tective clothing, gloves

The information required is contained in this Material Safety Data Sheet. 3. Composition/information on ingredients 3.1 Substances Identification: Ardrox 6092	Version: 4.1	Revision	Date 02.01.2012	Pr	int Date 03.01.201
mixturesdetergents: Non ionic surfactants < 5% Anionic surfactants, < 5 %		S60			
3. Composition/information on ingredients 3.1 Substances Identification: Ardrox 6092 3.2 Mixtures Chemical nature : Aqueous solution of alkali salts and surfactants. Hazardous components Chemical Name CAS-No. Classification (87/548/EEC) Classification (REGULATION (EC) No 1272/2008) 3-Butoxypropan-2- ol, propylene glycol monobutyl ether 5131-66-8 225-878-4 01-2119475527-28 Xi; R36/38 Eye Irrit. 2; H319 >= 3 - < 5		detergents Non ionic	s: surfactants < 5%	ulation (EC) No.64	18/2004 on
3. Composition/information on ingredients 3.1 Substances Identification: Ardrox 6092 3.2 Mixtures Chemical nature : Aqueous solution of alkali salts and surfactants. Hazardous components Chemical Name CAS-No. Classification (67/548/EEC) Classification (REGULATION (EC) No 1272/2008) 3-Butoxypropan-2- ol, propylene glycol monobutyl ether 5131-66-8 225-878-4 01-2119475527-28 Xi; R36/38 Eye Irrit. 2; H319 >= 3 - < 5	2.3 Other hazards				
Identification: Ardrox 60923.2 MixturesChemical nature : Aqueous solution of alkali salts and surfactants.Hazardous componentsChemical Name CAS-No. EC-No. Registration num- berClassification (67/548/EEC)Concentration (REGULATION (EC) No 	The information require	ed is contained in this	Material Safety Da	ta Sheet.	
Hazardous componentsChemical NameCAS-No. EC-No. Registration num- berClassification (67/548/EEC)Classification (REGULATION (EC) No 1272/2008)Concentration [%]3-Butoxypropan-2- ol,propylene glycol monobutyl ether5131-66-8 225-878-4 01-2119475527-28Xi; R36/38Eye Irrit. 2; H319>= 3 - < 5	3.1 Substances	-	S		
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Chemical nature	: Aqueous s	solution of alkali sa	lts and surfactants	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Hazardous componer	nts			
3-Butoxypropan-2- ol,propylene glycol monobutyl ether5131-66-8 225-878-4 01-2119475527-28Xi; R36/38Eye Irrit. 2; H319>= 3 - < 5Disodium metasilicate $6834-92-0$ 229-912-9 01-2119449811-37C; R34 Xi; R37Skin Corr. 1B; H314>= 1 - < 2.5	Chemical Name	EC-No. Registration num-		(REGULATION (EC) No	
229-912-9 01-2119449811-37 Xi; R37 H314 STOT SE 3; H335 C12 - 15 Alcohol eth- oxylate 68131-39-5 Xn; R22 Xi; R41 N; R50 Acute Tox. 4; 	ol,propylene glycol	225-878-4	Xi; R36/38	Eye Irrit. 2; H319 Skin Irrit. 2;	>= 3 - < 5
oxylate H302 Xi; R41 Eye Dam. 1; N; R50 Aquatic Acute	Disodium metasilicate	229-912-9		H314 STOT SE 3;	>= 1 - < 2.5
		68131-39-5	Xi; R41	H302 Eye Dam. 1; H318 Aquatic Acute	>= 1 - < 2.5

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For the full text of the H-State	ses mentioned in this Section, see Section ements mentioned in this Section, see Section mentioned in this Section, see Section 16.	ction 16.
4. First aid measures		
4.1 Description of first aid meas	sures	
General advice	: First-aid crew: Ensure self-protection Move out of dangerous area. Take off contaminated clothing and	
If inhaled	: Move to fresh air. If symptoms persist, call a physician	
In case of skin contact	: Wash off with soap and plenty of wa Call a physician immediately.	ter.
In case of eye contact	: Rinse immediately with plenty of war Call a physician immediately.	ter, also under the eyelids.
If swallowed	: Clean mouth with water and drink af Do NOT induce vomiting. Call a physician immediately.	terwards plenty of water.
4.2 Most important symptoms a	nd effects, both acute and delayed	
Risks	: corrosive effects	
I.3 Indication of any immediate	medical attention and special treatmer	nt needed
Treatment	: Treat symptomatically. For specialist advice physicians sho Information Service.	uld contact the Poisons
5. Firefighting measures		
5.1 Extinguishing media		
Suitable extinguishing media	: Carbon dioxide (CO2) Dry powder Alcohol-resistant foam Water spray	
Unsuitable extinguishing media 5.2 Special hazards arising from	: High volume water jet	
Specific hazards during fire- fighting	: May form toxic gases on heating or	in case of fire.



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5.3 Advice for firefighters			
Special protective equipment for firefighters	: 1	n the event of fire, wear self-contain	ned breathing apparatus.
Further information	: l	Jse water spray to cool unopened c	ontainers.
6. Accidental release measure	es		
6.1 Personal precautions, protec	tive	equipment and emergency proced	dures
Personal precautions		Ensure adequate ventilation. Near personal protective equipment	t.
6.2 Environmental precautions			
Environmental precautions	ľ	Do not flush into surface water or sa Avoid subsoil penetration. nform the relevant authorities if it er ronment or soil.	
6.3 Methods and materials for co	ontair	nment and cleaning up	
Methods for cleaning up	((((((((((((()))))))))))))	Ensure adequate ventilation. Contenga el derrame. Absorba con l combustible (p.ej., arena, tierra, diat sládelo a un contendedor adecuado según las normativas locales / nacio Contain spillage, soak up with non-c material, (e.g. sand, earth, diatomac and transfer to a container for dispos national regulations (see section 13)	omita, vermiculita) y tra- para su eliminación onales (ver sección 13). combustible absorbent eeous earth, vermiculite) sal according to local /
6.4 Reference to other sections			
See chapter 8 and 13			
7. Handling and storage			
7.1 Precautions for safe handling	g		
Advice on safe handling		Provide sufficient air exchange and/ Have eye wash bottle or eye rinse re	
Advice on protection against fire and explosion	: 1	Normal measures for preventive fire	protection.
7.2 Conditions for safe storage, i	inclu	ding any incompatibilities	
Requirements for storage areas and containers	ł	Keep containers tightly closed in a c Keep away from heat. Protect from frost.	ool, well-ventilated place.
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Storage temperature	: 10 - 35 °C	
7.3 Specific end uses		
Specific use(s)	: Cleaning agent	
8. Exposure controls/person	al protection	
8.1 Control parameters		
Contains no substances with	occupational exposure limit values.	
8.2 Exposure controls		
Engineering measures		
Ensure adequate ventilation,	especially in confined areas.	
Personal protective equipm	nent	
Respiratory protection	 In case of insufficient ventilation weak equipment. Recommended Filter type: A-P2 	r suitable respiratory
Hand protection	 Nitrile rubber Neoprene gloves Protective gloves complying with EN Please observe the instructions regar breakthrough time which are provided gloves. Also take into consideration the tions under which the product is used cuts, abrasion, and the contact time. 	rding permeability and d by the supplier of the he specific local condi-
Eye protection	: Eye protection (EN 166) Tightly fitting safety goggles Have eye wash bottle or eye rinse rea	ady at the work place.
Skin and body protection	: Chemical resistant protective clothing 13034 (Type 6)	according to DIN EN
Hygiene measures	 Take off contaminated clothing and s Keep away from food, drink and anim Wash hands before breaks and imme product. Avoid contact with skin and eyes. Do not breathe vapour. Do not breathe spray. 	nal feedingstuffs.
Environmental exposure co	ontrols	
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General advice	: Do not flush into surface water or san Avoid subsoil penetration. Inform the relevant authorities if it en ronment or soil.	
9. Physical and chemical pro	perties	
9.1 Information on basic physic	al and chemical properties	
Appearance	: liquid	
Colour	: colourless	
Odour	: like soap	
Flash point	: not applicable	
рН	: 12.7 (undiluted)	
Melting point/range	: -1 °C	
Boiling point/boiling range	: 99 °C	
Density	: 1.02 g/cm3 at 20 °C	
Water solubility	: completely miscible	
Viscosity, dynamic	: ca.5 mPa*s at 23 ℃	
9.2 Other information		
Explosivity	: no data available	
10. Stability and reactivity		
10.1 Reactivity		
No dangerous reaction know	n under conditions of normal use.	
10.2 Chemical stability		
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Stable under normal conditior 10.3 Possibility of hazardous rea		ons	
Hazardous reactions	:	None known.	
10.4 Conditions to avoid			
Conditions to avoid	:	Protect from frost.	
10.5 Incompatible materials			
Materials to avoid	:	Strong oxidizing agents	
10.6 Hazardous decomposition	oro	ducts	
Risk of decomposition.	:	No decomposition if stored and appli	ed as directed.
11. Toxicological information			
11.1 Information on toxicologica		fects	
Acute toxicity			
Acute oral toxicity	:	Acute toxicity estimate: 50,000 mg/k Method: Calculation method	g
Acute oral toxicity			
3-Butoxypropan-2- ol,propylene glycol monobu- tyl ether	:	LD50: 3,300 mg/kg Species: rat	
Disodium metasilicate	:	LD50: 1,153.0 mg/kg Species: rat	
C12 - 15 Alcohol ethoxylate	:	LD50: > 2,000 mg/kg Species: rat	
Acute inhalation toxicity C12 - 15 Alcohol ethoxylate	:	LC50/inhalation/4h/rat.: > 5 mg/l	
Acute dermal toxicity 3-Butoxypropan-2- ol,propylene glycol monobu- tyl ether	:	LD50: > 2,000 mg/kg Species: rat	
C12 - 15 Alcohol ethoxylate	:	LD50: > 2,000 mg/kg Species: rat	
Skin corrosion/irritation			

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Skin irritation	: Causes severe burns.	
Serious eye damage/eye i	rritation	
Eye irritation	: Causes serious eye damage.	
Respiratory or skin sensit	tization	
Sensitisation	: no data available	
Further information	: If swallowed, severe burns in the as danger of perforation of the d	
12. Ecological information		
12.1 Toxicity		
Ecotoxicology studies for th	e product are not available.	
Toxicity to fish 3-Butoxypropan-2- ol,propylene glycol monobu tyl ether	: LC50: > 100 mg/l Exposure time: 96 h Species: Pimephales promelas	(Fathead minnow)
C12 - 15 Alcohol ethoxylate	e : LC50: 1 - 10 mg/l	
Toxicity to daphnia and othe 3-Butoxypropan-2- ol,propylene glycol monobu tyl ether C12 - 15 Alcohol ethoxylate	: EC50: > 1,000 mg/l - Species: Daphnia	
Toxicity to algae C12 - 15 Alcohol ethoxylate	e : EC50: < 1 mg/l	
12.2 Persistence and degradal	bility	
Biodegradability	: no data available	
12.3 Bioaccumulative potentia	l	
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Bioaccumulation	: no data available	
12.4 Mobility in soil		
Distribution among environ- mental compartments 12.5 Results of PBT and vPvB as		
no data available		
12.6 Other adverse effects		
Additional ecological informa- tion	 slightly water endangering Do not flush into surface water or sa Avoid subsoil penetration. 	anitary sewer system.
13. Disposal considerations		
13.1 Waste treatment methods		
Product	: Dispose of in accordance with local	regulations.
Contaminated packaging	: Dispose of as unused product.	
Waste Code	: Waste codes should be assigned b discussion with the waste disposal a	
14. Transport information		
ADR UN number UN proper shipping name Transport hazard class(es) Packing group Classification Code Hazard identification No Packing instruction (LQ) Labels Tunnel restriction code Environmentally hazardous IATA UN number Description of the goods Class Packing group	 3266 CORROSIVE LIQUID, BASIC, INOP Metasilicate 8 II C5 80 LQ22 8 (E), no 3266 CORROSIVE LIQUID, BASIC, INOP Metasilicate 8 1	

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Labels	:	8	
Packing instruction (cargo aircraft) IATA C	:	812	
Environmentally hazardous	:	no	
Packing instruction (passen- ger aircraft) IATA_P	:	808	
Environmentally hazardous	:	no	
IMDG			
UN number Description of the goods	:	3266 CORROSIVE LIQUID, BASIC, INORGAN Metasilicate	IIC, N.O.S., Sodium
Class	:	8	
Packing group	:	1	
Labels	:	8	
EmS Number 1		F-A	
EmS Number 2	-	S-B	
Marine pollutant	:	no	
RID			
UN number		3266	
Description of the goods	:	CORROSIVE LIQUID, BASIC, INORGAN Metasilicate	NC, N.O.S., Sodium
Transport hazard class(es)	:	8	
Packing group	:	ll	
Classification Code	:	C5	
Hazard identification No	:	80	
Labels	:	8	
Packing instruction (LQ)	:	LQ22	
Environmentally hazardous	:	no	
5. Regulatory information			
5.1 Safety, health and environm	ent	al regulations/legislation specific for th	e substance or mixtur
Candidate List of Substances of Very High Concern for Authorisation	:	This product does not contain substances cern (Regulation (EC) No 1907/2006 (RE	
Water contaminating class (Germany)	:	WGK 1 slightly water endangering VWVWS A4	
Other regulations	:	The product is classified and labelled in a directives or respective national laws. Regional or national implementations of 0 ment all hazard classes and categories.	
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15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R34	Causes burns.
R36/38	Irritating to eyes and skin.
R37	Irritating to respiratory system.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.
Full text of H-Sta	atements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.