

# **HumiSeal**®







0

## SAFETY DATA SHEET

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier			
Trade name or designation of the mixture	HumiSeal Stripper 1063		
Registration number	-		
Synonyms	None.		
Product code	HumiSeal Europe Stripper 1063		
Issue date	23-June-2015		
Version number	06		
Revision date	03-May-2018		
Supersedes date	16-March-2018		
1.2. Relevant identified uses of the	he substance or mixture and us	ses advised against	
Identified uses	Coating Remover for Printed Cit	rcuit board	
Uses advised against	None known.		
1.3. Details of the supplier of the	safety data sheet		
Supplier			
Company name	HUMISEAL EUROPE LTD.		
Address	505 Eskdale Road		
	Winnersh		
	Wokingham Berkshire RG41 5T	0	
Division	A CHASE CORPORATION COM	MPANY	
Telephone	General Assistance	44 (0) 118 944 2333	
e-mail	europetechsupport@chasecorp	.com	
Contact person	Not available.		
1.4. Emergency telephone number	Chemtrec USA	1-800-424-9300	
	OutSide USA	+1 703-741-5970	

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards		
Flammable liquids	Category 2	H225 - Highly flammable liquid and vapour.
Health hazards		
Acute toxicity, oral	Category 3	H301 - Toxic if swallowed.
Acute toxicity, dermal	Category 3	H311 - Toxic in contact with skin.
Acute toxicity, inhalation	Category 3	H331 - Toxic if inhaled.
Skin corrosion/irritation	Category 1B	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.

Category 1

#### Hazard summary

May be ignited by heat, sparks or flames. Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed. Causes severe skin burns and eye damage. Causes damage to organs. Occupational exposure to the substance or mixture may cause adverse health effects.

#### 2.2. Label elements

Signal word

Label according to Regulation (EC) No. 1272/2008 as amended

METHANOL, POTASSIUM HYDROXIDE **Contains:** 

Hazard pictograms



olgilal word	Danger
Hazard statements	
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H370	Causes damage to organs.

#### **Precautionary statements**

Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe mist or vapour.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE/doctor.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use appropriate media to extinguish.
Storage	
P235	Keep cool.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental label information	3 % of the mixture consists of component(s) of unknown acute dermal toxicity. 100 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 97 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.
2.3. Other hazards	Not a PBT or vPvB substance or mixture.

#### **SECTION 3: Composition/information on ingredients**

3.2. Mixtures

General information					
Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
METHANOL	90 - 100	67-56-1 200-659-6	01-2119433307-44-XXXX	603-001-00-X	#
	lam. Liq. 2;H225, Acı E 1;H370	ute Tox. 3;H301, Ad	cute Tox. 3;H311, Acute Tox. 3	;H331, STOT	
POTASSIUM HYDROXIDE	3 - < 5	1310-58-3 215-181-3	01-2119487136-33-xxxx	019-002-00-8	
Classification:	Acute Tox. 4;H302, Sk	kin Corr. 1A;H314,	Eye Dam. 1;H318, Aquatic Chr	onic 3;H412	
List of abbreviations and sym #: This substance has been M: M-factor PBT: persistent, bioaccumu vPvB: very persistent and v All concentrations are in per	n assigned Union wor Ilative and toxic subst ery bioaccumulative s	kplace exposure lin ance. substance.	nit(s). Is. Gas concentrations are in p	ercent by volume.	
Composition comments	The full text for a	II H-statements is c	lisplayed in section 16.		
SECTION 4: First aid me	asures				
General information	label where poss take precautions	ible). Ensure that r	ed clothing. If you feel unwell, s nedical personnel are aware of ves. Show this safety data shee reuse.	the material(s) inv	olved, and
4.1. Description of first aid me					
Inhalation	artificial respiration	on if needed. Do no espiration with the	<ul> <li>at rest in a position comfortab ot use mouth-to-mouth method aid of a pocket mask equipped Call a POISON CENTRE or doc</li> </ul>	if victim inhaled the with a one-way va	e substance.
Skin contact	poison control ce		ed clothing. Rinse skin with wa Chemical burns must be treated		
Eye contact			of water for at least 15 minutes. nsing. Call a physician or poiso		
Ingestion	vomiting occurs, mouth-to-mouth	keep head low so f method if victim ing	entre immediately. Rinse mouth that stomach content doesn't g jested the substance. Induce a -way valve or other proper resp	et into the lungs. D	o not use with the aid of
4.2. Most important symptom and effects, both acute and delayed	serious eye dam	age. Symptoms ma	iting. Burning pain and severe ay include stinging, tearing, red uding blindness could result.		
4.3. Indication of any immediate medical attention and special treatment needed	immediately. Wh ambulance. Con immediately. Wh ambulance. Con	ile flushing, remove tinue flushing durin ile flushing, remove	es and treat symptomatically. T e clothes which do not adhere t g transport to hospital. Chemic e clothes which do not adhere t g transport to hospital. Keep vi ayed.	o affected area. Ca al burns: Flush with o affected area. Ca	all an 1 water all an
SECTION 5: Firefighting	measures				
General fire hazards	Highly flammable	e liquid and vapour.			
5.1. Extinguishing media Suitable extinguishing media	Water fog. Alcoh	ol resistant foam. D	Dry chemical powder. Carbon d	ioxide (CO2).	
Unsuitable extinguishing media	Do not use water	r jet as an extinguis	her, as this will spread the fire.		
5.2. Special hazards arising from the substance or mixtur	· · · · · · · · · · · · · · · · · · ·		es with air. Vapours may travel uring fire, gases hazardous to t		
5.3. Advice for firefighters Special protective equipment for firefighters		reathing apparatus	and full protective clothing mus	st be worn in case	of fire.
Special fire fighting procedures	In case of fire an so without risk.	d/or explosion do n	ot breathe fumes. Move contai	ners from fire area	if you can do
Specific methods	Use standard fire	efighting procedure	s and consider the hazards of o	other involved mate	erials.

Material name: HumiSeal Stripper 1063HumiSeal Europe Stripper 1063Version #: 06Revision date: 03-May-2018Issue date: 23-June-2015

#### **SECTION 6: Accidental release measures**

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

••••••••••••••••••••••••••••••••••••••	and admittance and games his accurate
For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This product is miscible in water.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.
<b>SECTION 7: Handling and</b>	storage
7.4. Drocoutions for onfo	Denot handle, store or open poor on open flome, sources of heat or sources of ignition. Brotest

handling	material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapour. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Not available.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **Occupational exposure limits**

UK. EH40 Workplace Expos Components	Туре	Value	
METHANOL (CAS 67-56-1)	STEL	333 mg/m3	
		250 ppm	
	TWA	266 mg/m3	
		200 ppm	
POTASSIUM HYDROXIDE (CAS 1310-58-3)	STEL	2 mg/m3	
FU. Indicative Exposure Lin	nit Values in Directives 91/322/FFC	2000/39/EC, 2006/15/EC, 2009/161/EU	
		2000/00/2000/10/2000/10/20	
Components	Type	Value	
-			
Components	Туре	Value	
Components	Туре	Value 260 mg/m3 200 ppm	
Components METHANOL (CAS 67-56-1)	<b>Туре</b> TWA	Value 260 mg/m3 200 ppm for the ingredient(s).	

Predicted no effect concentrations (PNECs)	Not available.
Exposure guidelines UK EH40 WEL: Skin design	
METHANOL (CAS 67-56	5-1) Can be absorbed through the skin.
8.2. Exposure controls	
Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures,	, such as personal protective equipment
General information	Wear chemical protective equipment that is specifically recommended by the manufacturer. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Chemical respirator with organic vapour cartridge and full facepiece.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapour cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Environmental manager must be informed of all major releases.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Colour	Clear.
Odour	Alcoholic
Odour threshold	Not available.
рН	Does not apply.
Melting point/freezing point	-97.8 °C (-144.04 °F) estimated
Initial boiling point and boiling range	64.7 °C (148.46 °F) estimated
Flash point	11.1 °C (52.0 °F)
Evaporation rate	6.1 BuAc
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	7.3 % estimated
Flammability limit - upper (%)	36 % estimated
Vapour pressure	169.3 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	miscible
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature	240 °C (464 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	
Density	0.84 g/cm3 estimated
Miscible (water)	miscible
Percent volatile	95 - 98 % v/v
Specific gravity	0.84 estimated
VOC	639 g/l

#### **SECTION 10: Stability and reactivity**

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

#### **SECTION 11: Toxicological information**

General information	Occupational exposure to the substance or mixture may cause adverse effects.	
Information on likely routes of exposure		
Inhalation	Toxic if inhaled. May cause damage to organs by inhalation.	
Skin contact	Toxic in contact with skin. Causes severe skin burns.	
Eye contact	Causes serious eye damage.	
Ingestion	Toxic if swallowed. Causes digestive tract burns.	
Symptoms	Headache. Dizziness. Nausea, vomiting. Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.	
11.1. Information on toxicological effects		
Acute toxicity	Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.	
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.	
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.	

Due to partial or complete lack of data the classification is not possible. **Reproductive toxicity** Due to partial or complete lack of data the classification is not possible. Specific target organ toxicity -Causes damage to organs.

single exposure	
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible. Mixture versus substance No information available.

Other information Not available.

### **SECTION 12: Ecological information**

12.1. Toxicity

information

Based on available data, the classification criteria are not met for hazardous to the aquatic environment, long term. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, acute hazard, is not possible.

Components		Species	Test results
METHANOL (CAS 67-56-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
POTASSIUM HYDROXIDE (CAS	1310-58-3)		
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	80 mg/l, 96 hours
* Estimates for product may b	ne hased on add	itional component data not shown.	
12.2. Persistence and degradability			
12.3. Bioaccumulative potential	l		
Partition coefficient			
n-octanol/water (log Kow) METHANOL		-0.77	
Bioconcentration factor (BCF)	Not available	•	
12.4. Mobility in soil	No data avail		
12.5. Results of PBT and vPvB assessment	Not a PBT or	vPvB substance or mixture.	
12.6. Other adverse effects	The product of potential.	contains volatile organic compounds which	have a photochemical ozone creation
SECTION 13: Disposal considerations			

#### 13.1. Waste treatment methods Dispose of in accordance with local regulations. Empty containers or liners may retain some **Residual waste** product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). **Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal methods/information** contents/container in accordance with local/regional/national/international regulations. **Special precautions** Dispose in accordance with all applicable regulations.

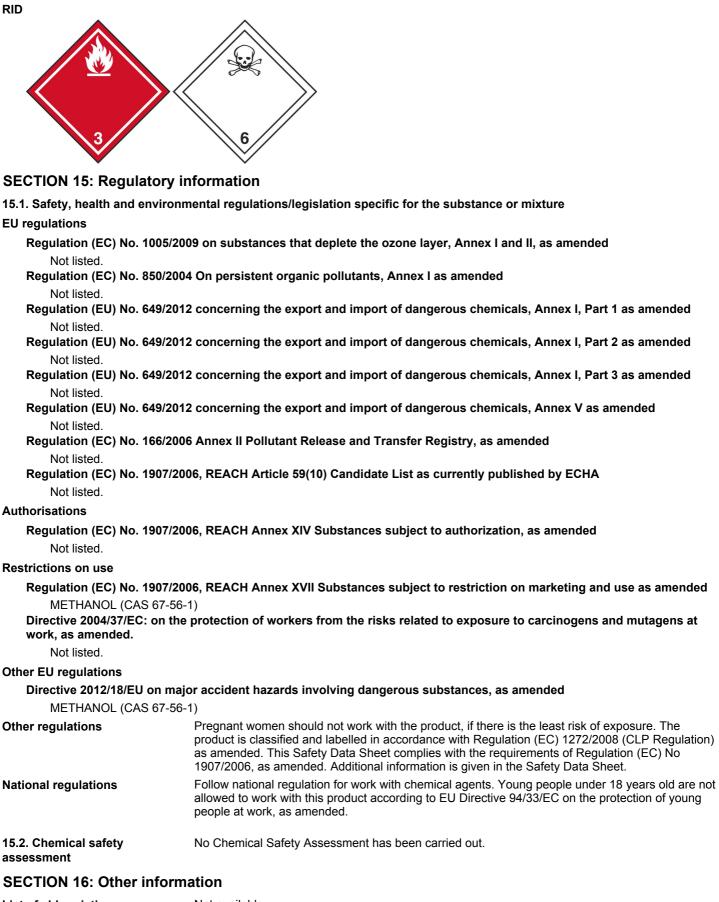
### **SECTION 14: Transport information**

ADR		
14.1. UN number	UN2924	
14.2. UN proper shipping name	FLAMMABLE LIQUID, CORROSIVE, N.O.S.(METHANOL, POTASSIUM HYDROXIDE)	
14.3. Transport hazard class(es)		
Class	3	
Subsidiary risk	8	
Label(s)	3 +8	
Hazard No. (ADR)	338	
Tunnel restriction code	D/E	
14.4. Packing group	II	
14.5. Environmental hazards	No.	
14.6. Special precautions	Read safety instructions, SDS and emergency procedures before handling.	
for user		
RID		
14.1. UN number	UN1230	
14.2. UN proper shipping name	METHANOL, SOLUTION (METHANOL)	
14.3. Transport hazard class(es)		
Class	3	
Subsidiary risk	6.1(PGI, II)	
Label(s)	3+6.1	
14.4. Packing group	II	

14.5. Environmental hazards No. 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user ADN UN2924 14.1. UN number FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHANOL, POTASSIUM HYDROXIDE) 14.2. UN proper shipping name 14.3. Transport hazard class(es) Class 3 Subsidiary risk 8 Label(s) 3+814.4. Packing group Ш 14.5. Environmental hazards No. 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user ΙΑΤΑ UN2924 14.1. UN number FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHANOL, POTASSIUM HYDROXIDE) 14.2. UN proper shipping name 14.3. Transport hazard class(es) 3 Class 8 Subsidiary risk Ш 14.4. Packing group 14.5. Environmental hazards No. **ERG Code** 3CH 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user Other information Allowed with restrictions. Passenger and cargo aircraft Cargo aircraft only Allowed with restrictions. IMDG UN2924 14.1. UN number 14.2. UN proper shipping FLAMMABLE LIQUID, CORROSIVE, N.O.S. (METHANOL, POTASSIUM HYDROXIDE) name 14.3. Transport hazard class(es) Class 3 Subsidiary risk 8 14.4. Packing group Ш 14.5. Environmental hazards Marine pollutant No. EmS F-E, S-C 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user 14.7. Transport in bulk Not established. according to Annex II of Marpol and the IBC Code

ADN; ADR; IATA; IMDG





List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements	
not written out in full under	
Sections 2 to 15	

Sections 2 to 15	<ul> <li>H225 Highly flammable liquid and vapour.</li> <li>H301 Toxic if swallowed.</li> <li>H302 Harmful if swallowed.</li> <li>H311 Toxic in contact with skin.</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H318 Causes serious eye damage.</li> <li>H331 Toxic if inhaled.</li> <li>H370 Causes damage to organs.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>
<b>Revision information</b>	This document has undergone significant changes and should be reviewed in its entirety.
Training information	Follow training instructions when handling this material.
Disclaimer	The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose HUMISEAL EUROPE LTD. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.