

Tradename : **Hans Raab Kalkex**Company / Distributor : HA-RA UMWELT - UND REINIGUNGSTECHNIK HANS RAAB GMBH
HA-RA UMWELTTECHNOLOGIE - ZENTRUM, D-66287 QuierschiedTelephone : ++ 49 6897-604-0, Date of issue: 08.08.2008 Replaces Data Sheet of : First elaboration
"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

1 Identification of Substance/Preparation and Company															
1.1	Identification of the Substance or Preparation Tradename : Hans Raab Kalkex Article - No : Preparation - No : n.ap.														
1.2	Company / Undertaking identification														
1.2.1	Address of the Company / Undertaking : HA-RA UMWELT - UND REINIGUNGSTECHNIK HANS RAAB GMBH HA-RA UMWELTTECHNOLOGIE - ZENTRUM, D - 66287 Quierschied Telephone : 06897-604-0, Fax : 06897-604-200+225														
1.2.2	Responsible : Chemie & Vorschrift, Fischbach 19, D - 35418 Großen - Buseck														
1.3	Emergency - Telephone : Information Centre Specializing in Symptoms of Poisoning Telephone : ++49 - 30 - 302 30 22 Emergency - Telephone of the Company / Undertaking Telephone : ++496897 - 604 - 0														
2 Composition/Information of Ingredients															
2.1	Chemical Characterization : Aliphatic Tricarbon Acid														
2.2	Dangerous Ingredients : <table border="1"> <thead> <tr> <th>CAS-No.,</th> <th>Index-No.,</th> <th>EEC-No.,</th> <th>Material</th> <th>m% - range,</th> <th>Symbol,</th> <th>R-phrases</th> </tr> </thead> <tbody> <tr> <td>77-92-9</td> <td>n. a.</td> <td>201-069-1</td> <td>Lemon Acid</td> <td>> 99%</td> <td>n.a</td> <td>n.a.</td> </tr> </tbody> </table>	CAS-No.,	Index-No.,	EEC-No.,	Material	m% - range,	Symbol,	R-phrases	77-92-9	n. a.	201-069-1	Lemon Acid	> 99%	n.a	n.a.
CAS-No.,	Index-No.,	EEC-No.,	Material	m% - range,	Symbol,	R-phrases									
77-92-9	n. a.	201-069-1	Lemon Acid	> 99%	n.a	n.a.									
Remarks : Classification and characteristics of a preparation, see item 15.															
3 Hazards Identification															
3.1	For Human (additional information is given under item 11) : May cause temporary skin and eye irritation.														
3.2	For the Environment : No special dangers known.														
3.3	For Material : Able to corrode most metals.														
4 First Aid Measures															
4.1	Inhalation : After inhalation of fumes from fire remove from danger zone and ensure much free air.														
4.2	After skin contact : Wash with water and soap. If continuing irritation occurs see a doctor.														
4.3	After eye contact : When contact with eye occurs, wash off thoroughly with water. If continuing irritation occurs see a doctor.														
4.4	Ingestion : Rinse mouth and drink plenty of water. Do not induce vomiting.														
4.5	Notes to Physician : None														
4.6	Special Equipment : No														
5 Fire - Fighting Measures															
5.1	Suitable Extinguishing Media : Water spray jet foam, dry chemicals, CO ₂														
5.2	Extinguishing Media to avoid : None														
5.3	Fire and Explosion Hazards : In case of fire there is a possibility of production of organical side-products and carbon oxide.														

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9.2.6	Autoflammability (EG A16)	1010 °C (Literatur)
9.2.7	Oxidizing Properties :	n.a..
9.2.8	Explosion hazard :	n.a.
9.2.9	Explosion limits (Vol.%) lower :	8 - Staub (Literatur), obere : 65 - Staub (Literatur)
9.2.10	Vapour pressure :	ca 0.
9.2.11	Density (g/ml) :	1,665 (Schüttdichte: 900 - 980 kg/1000l)
9.2.12	Solubility (in Water) :	592 g/l Löslich in : Alkohol
9.2.13	Partition coefficient, n-Octanol/Water :	1,72 (Literatur)
9.2.14	Viscosity :	n.a.
9.2.15	Solvent separation test :	n.a.
9.2.16	Solvent content (m %) ;	n.a.
9.3	Further Data	
9.3.1	Thermal decomposition (°C) :	> 175 °C
9.3.2	Vapour density (Air = 1) :	n.a.
9.3.3	Evaporation rate :	n.v.
10	Stability and Reactivity	
10.1	Conditions to avoid :	Temperatures higher than 175 °C. The product is not explosive in the form delivered. However the formation of fine dust could form a danger of explosion.
10.2	Materials to avoid :	Reactions with oxidation media. Reaction with alkaloids (lyes).
10.3	Hazardous decomposition Products :	No dangerous decomposition products known.
10.4	Further Information :	No.
11	Toxicological Information	
11.1	Toxicological Tests	
11.1.1	Acute Health Effects :	
	Inhalation, LC _{50 rat} , (mg/l/4h) :	n.av.
	Ingestion, LD _{50 rat} , (mg/kg) :	> 3000 (Literatur)
	Skin - contact, LD _{50 rat} , (mg/kg) :	n.av.
	Irritation (to Skin/Eye) :	Little irritation - no obligation to register.
	Sensitization :	No.
11.1.2	Subacute/chronicle Toxicity :	
	Carcinogenicity :	No.
	Mutagenicity :	No.
	Teratogenicity	No.
	Narcotic Effects :	No.
11.2	Practical Experience	
11.2.1	Observations relevant for classification :	No
11.2.2	Further Observations :	No.
11.3	General Remarks :	
	References to Toxicology are for the pure product.	
12	Ecological Information	
12.1	Elimination (Persistence and Degradability) :	
	This product is biological degradable.	
12.2	Behaviour in Sewage Works :	
	Mobility and Accumulation-potential : n.av.	
	According to today's scientific knowledge there are no negative ecological problems to be expected.	

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12.3	Ecotoxic Effects, aquatic Toxicity : According to today's scientific knowledge there are no negative ecological problems to be expected.
12.4	Other ecological Information
12.4.1	COD-Value, mg/g : n.av. 12.4.2 BOD₅-Value, mg/g : n.av.
12.4.3	AOX - Remarks : n.av.
12.4.4	Significant Components : n.av.
13	Disposal Considerations (For national Regulations refer to item 15.)
13.1	Residues
13.1.1	Recommendation : Stick to special instructions by local authorities.
13.1.2	Safe Handling :
13.2	Contaminated Packing
13.2.1	Recommendation : Rinse with appropriate cleaning agents. Further as for product residues.
13.2.2	Safe Handling : As for product residue.
14	Transport Information
14.1	Transportation by Road or Railway according to ADR/GGVS and RID/GGVE Remarks : Not dangerous goods according to ADR Class : Division :
14.1.1	Instructions for Transportation in Tanks : Hazard - No : UN-No.: Instruction concerning Shipper's Declaration and Packaging: Volume or Mass Description of Goods Risk Packing - Code label or marginal
14.1.2	Listed Cargo as per Appendix B.8 : n.a.
14.1.3	Additional Designation in the Shipper's Declaration : Inscription on Packaging :
14.2	Classification for Transportation by Inland-navigation according to ADNO/GGVBInSch Remarks : Classification has not been done. Class : Division : Category:
14.2.1	Description of Goods : 14.2.2 Remarks :
14.3	Classification for Transportation by Vessels according to IMDG/GGVSee Remarks : No dangerous good according to IMDG Class : UN-NO : Packing Group :
14.3.1	EmS-No. : MFAG-Table
14.3.2	Marine pollutant :
14.3.3	Instruction for the responsible Declaration and Labelling : (Without consideration of packing sizes for possible exemptions.) Proper Shipping Name : Risk Label :
14.3.4	Remarks :
14.4	Classification for Transportation by Aeroplane according to IATA-DGR/ICAO-TI Remarks : No dangerous good according to IATA-DGR Class : UN-NO. : Packing Group :
14.4.1	Instruction for the responsible Declaration and Labelling : (Without consideration of packing sizes for possible exemptions.) Proper Shipping Name: Risk Label : Packing Instructions, Passenger : Cargo :
14.4.2	Remarks :
15	Regulatory Information

