1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : reDEWce

Chemical Name : Polyether-modified polysiloxane

1.2. Recommended use of the chemical and restrictions on use

Recommended use : Industrial Use

Non-recommended use(s) : None known.

1.3. Details of the supplier of the safetydata sheet

Company : AQUA-AID, Inc.
5484 S.Old Carriage Rd
Rocky Mount, NC 23860
USA

Telephone : 252-937-4107

Telefax : 252-443-0320

E-mail : info@aquaaid.com

1.4. Emergency telephone number

Emergency information : Non-Emergency Phone Number : (800) 394-1551
In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD: 1-703-527-3887.

24 HOUR EMERGENCY TELEPHONE NUMBERS:
CHEMTREC - US & CANADA toll free: +1-800-424-9300
CHEMTREC - MEXICO toll free: 01-800-681-9531
CHEMTREC GLOBAL - Collect calls accepted: +1-703-527-3887

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200

Acute toxicity (Inhalation)	Category 4	H332
Eye irritation	Category 2	H319
Chronic aquatic toxicity	Category 2	H411
Acute toxicity (Dermal)	Category 4	H312

2.2. Label elements

Symbol(s) :

Signal word : Warning

hazard statement : H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H312 - Harmful in contact with skin.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statement (Prevention)	:	P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P273 - Avoid release to the environment. P280 - Wear protective gloves/ eye protection/ face protection.
Precautionary Statement (Response)	:	P337 + P313 - If eye irritation persists: Get medical advice/ attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302 + P352 - IF ON SKIN: Wash with plenty of water/ soap.

2.3. Other hazards

None known

3. Composition/information on ingredients

3.1. Substances

Classification according to Regulation 29CFR 1910.1200

Chemical Name	NJ Trade secrets CAS-No.	Concentration	Classification
polyether modified trisiloxane	- 134180-76-0	>= 75 %	H332, 4 , Acute Tox. , Inhalation H312, 4 , Acute Tox. , Dermal H411, 2 , Aquatic Chronic H319, 2 , Eye Irrit.

Texts of H phrases, see in Chapter 16

3.2. Mixtures

-

4. First aid measures

4.1. Description of first aid measures

General advice	:	Remove soiled or soaked clothing immediately
Inhalation	:	Remove individual from site of exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
Skin contact	:	Immediately and thoroughly, wash off with soap and water.
Eye contact	:	In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice.
Ingestion	:	If swallowed, seek medical attention and show MSDS.

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

Symptoms	:	Eye irritation

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

Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	foam, carbon dioxide, dry powder, water spray.
Unsuitable extinguishing media	:	Full water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released:
- Carbon monoxide, carbon dioxide, silicon dioxide

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Collect contaminated firefighting water separately, must not be discharged into the drains.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not allow to enter drains or waterways
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder)
Dispose of absorbed material in accordance with the regulations.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	:	No special measures necessary if stored and handled as prescribed.
Handling	:	no data available
Hygiene measures	:	No smoking, eating or drinking allowed when using this product. Wash hands before breaks and at end of work shift. Protective ointment is recommended.
General protective measures	:	Avoid contact with eyes and skin Do not inhale gases/vapours/aerosols.

7.2. Conditions for safe storage, including any incompatibilities

Prevention of fire and explosion

Information	:	No special measures required.

Storage

Information	:	none
Further information on storage conditions	:	Keep container tightly closed

8. Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Engineering controls

Appropriate engineering controls : Good general (mechanical) ventilation should be sufficient to control airborne levels.

Personal protective equipment

Eye protection : Safety goggles and/or face shield is recommended for use.

Hand protection : Examples of suitable gloves are those made by the company Kächele-Cama Latex GmbH, Am Kreuzacker 9, D-36124 Eichenzell, e-mail vertrieb@kcl.de, with subsequent specification (test according to EN374); specific workplace conditions must be separately taken into account.
These recommendations apply only to the product mentioned in the material data safety sheet that we supply and the purpose that we indicate.
Glove material: gloves made of nitril (NBR)
Break through time: 480 min
Glove thickness: 0.11 mm

Glove material: gloves made of natural latex
Break through time: 480 min
Glove thickness: 0.5 mm

Glove material: gloves made of chloroprene (CR, e.g. Neoprene)
Break through time: 480 min
Glove thickness: 0.65 mm

Glove material: gloves made of butyl (IIR)
Break through time: 480 min
Glove thickness: 0.7 mm

Body Protection : Light protective clothing is required.

Respiratory protection : Wear dust/mist respirator (MSHA/NIOSH TC-21C) or NIOSH approved respirator with N,R,P or HE filter.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	liquid
Colour	:	light yellow
Odour	:	characteristic
Odour Threshold	:	not measured
pH	:	6 - 8 (25 °C) 40 g/l Remarks: water
Melting point	:	Melting temperature < 0 °C

Boiling point	:	Boiling temperature > 200 °C
Flash point	:	216 °F Method: TAG CC
Evaporation rate	:	not measured
Flammability	:	no data available
Upper Explosion/Ignition Limit	:	not measured
Lower explosion limit	:	not measured
Vapour pressure	:	not measured
Relative vapour density	:	not measured
Relative density	:	no data available
Solubility(ies)	:	not measured
Water solubility	:	(25 °C) Remarks: soluble
Partition coefficient: n-octanol/water	:	not measured
Autoignition temperature	:	not measured
Thermal decomposition	:	not measured
Viscosity, kinematic	:	no data available
Viscosity, dynamic	:	40 - 90 mPa·s (25 °C) Method: DIN 53019
Explosive properties	:	not measured
Oxidising properties	:	not oxidizing

9.2. Other information

Density	:	1.009 g/cm3
Metal corrosion	:	Not corrosive to metals.
Ignition temperature	:	not measured

10. Stability and reactivity

10.1. Reactivity

see section "Possibility of hazardous reactions"

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No
No hazardous reactions with proper storage and handling.

10.4. Conditions to avoid

None with proper storing and handling.

10.5. Incompatible materials

Unknown

10.6. Hazardous decomposition products

None with proper storage and handling.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	LD50 Species: Quail Dose: > 2,250 mg/kg
Acute toxicity (inhalation)	:	LC50 Species: rat Exposure duration: 4 h Test atmosphere: dust/mist Dose: 1.08 mg/l Method: OECD Test Guideline 403
Acute toxicity (dermal)	:	LD50 Species : rabbit Dose: 1,550 mg/kg LD50 Species: rat Dose: > 2,000 mg/kg
Irritation/corrosion of the skin	:	Result: slight irritant effect - does not require labelling
Serious eye damage/ eye irritation	:	Species: rabbit Result: strong irritant
Respiratory/skin sensitization	:	Species: Guinea pig Result: non-sensitizing Classification: Did not cause sensitisation on laboratory animals.
Repeated dose toxicity	:	no data available

CMR assessment

Carcinogenicity	: no data available
Mutagenicity	: no data available
Teratogenicity	: no data available
Toxicity to reproduction	: no data available

US. National Toxicology Program (NTP) Report on Carcinogens
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. IARC Monographs on Occupational Exposures to Chemical Agents
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001 -1050)
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

US. ACGIH Threshold Limit Values
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Specific Target Organ Toxicity - Single exposure	: no data available
Specific Target Organ Toxicity - Repeated exposure	: no data available
Aspiration hazard	: No aspiration toxicity classification
Other information	: The toxicological values refer to the undiluted 100% substance

12. Ecological information

Ecotoxicology Assessment

Acute aquatic toxicity	: Hazardous to the aquatic environment
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Aquatoxicity, fish	: Species : rainbow trout Exposure duration: 96 h LC50: 2.1 mg/l
Aquatoxicity, invertebrates	: Species: Daphnia magna Exposure duration: 48 h EC50: 1.1 mg/l
Aquatoxicity, algae / aquatic plants	: Species: Scenedesmus subspicatus Exposure duration: 72 h EbC50: 28.2 mg/l Remarks: refer to biomass

Species: Scenedesmus subspicatus
Exposure duration: 72 h
ErC50: 152.2 mg/l
Remarks: growth rate

Toxicity in microorganisms	:	no data available
chronic toxicityin fish	:	no data available
Chronic toxicity in aquatic Invertebrates	:	no data available
Toxicity in organisms which live in the soil	:	no data available
Toxicity in terrestrial plants	:	no data available
Toxicity to Above-Ground Organisms	:	no data available

12.2. Persistence and degradability

Photodegradation	:	no data available
Biological degradability	:	no data available
Physico-chemical removability	:	no data available
Biochemical Oxygen Demand (BOD)	:	no data available
Chemical Oxygen Demand (COD)	:	no data available
relation of BOD/COD	:	no data available
Dissolved organic carbon (DOC)	:	no data available
Adsorbed organic bound halogens (AOX)	:	no data available
Distribution among environmental compartments	:	no data available

12.3. Bioaccumulative potential

Bioaccumulation	:	no data available

12.4. Mobility in soil

Environmental distribution	:	no data available

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment : no data available

12.6. Other adverse effects

General Information : Use best management practices to limit uncontrolled release to waterways.

13. Disposal considerations

13.1. Waste treatment methods

Product : In accordance with local authority regulations, take to special waste incineration plant

Contaminated packaging : If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

D.O.T. Road/Rail

14.1	UN number:	UN 3082
14.2	UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyethersiloxane)
14.3	Transport hazard class(es):	9
14.4	Packing group:	III
14.5	Environmental hazards (Marine pollutant):	Yes
14.6	Special precautions for user:	No

Air transport ICAO-TI/IATA-DGR

14.1.	UN number:	UN 3082
14.2.	UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyethersiloxane)
14.3.	Transport hazard class(es):	9
14.4.	Packing group:	III
14.5.	Environmental hazards:	Yes
14.6.	Special precautions for user:	No

Sea transport IMDG-Code/GGVSee (Germany)

14.1.	UN number:	UN 3082
14.2.	UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyethersiloxane)
14.3.	Transport hazard class(es):	9
14.4.	Packing group:	III
14.5.	Environmental hazards (Marine pollutant):	Yes
14.6.	Special precautions for user:	Yes
	EmS:	F-A,S-F
	Stowage category A	

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
for transportapproval see regulatory information

15. Regulatory information

Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation and the (M)SDS contains all information required bythe Controlled Products Regulation

Canada : WHMIS CLASSIFICATION
Class D, Division 2, Subdivision B
This product does not contain component(s) on the WHMIS Ingredient Disclosure List.

US regulations:

SARA Title III Section 311/312 Hazard Categories : Acute Health Hazard

Other regulations : CTFA: complies

State Right to Know : SAR A 313: This product contains no SARA Title III, Section 313 listed chemicals.

ZUSPA_RTK: No components are subject to the Pennsylvania Right to Know Act.

ZUSMA_RTK: No components are subject to the Massachusetts Right to Know Act.

ZUSNJ_RTK: No components are subject to the New Jersey Right to Know Act.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA lists : TSCA - All intentional ingredients are listed in the TSCA Inventory or comply with TSCA Polymer Exemption critieria per 40 CFR 723. - Yes

SEC 8(E) - Yes

HMIS Ratings

Health:	2
Flammability:	1
Reactivity:	0
Personal Protection:	X

Notification status

USA (TSCA) : listed/registered or exempted
Canada (NDSL) : listed/registered or exempted

16. Other information

List of references

Revision date : 01/06/2015

Relevant H phrases from chapter 3

H312 : Harmful in contact with skin.
H319 : Causes serious eye irritation.
H332 : Harmful if inhaled.
H411 : Toxic to aquatic life with long lasting effects.

Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADNR	European agreement concerning the international carriage of dangerous goods by inland waterways (ADN)
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BetrSichV	German Ordinance on Industrial Safety and Health
c.c.	closed cup
CAS	Chemical Abstract Services
CESIO	European Committee of Organic Surfactants and their Intermediates
ChemG	German Chemicals Act
CMR	carcinogenic-mutagenic-toxic for reproduction
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	half maximal effective concentration
GefStoffV	German Ordinance on Hazardous Substances
GGVSEB	German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee	German ordinance for sea transportation of dangerous goods
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
ISO	International Organization For Standardization
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
REACH	REACH registration
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA	Technical Instructions
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCI	German chemical industry association
vPvB	very persistent, very bioaccumulative
VOC	volatile organic compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organization