

SAFETY DATA SHEET

SDS

Last changed: 2012-10-25

Internal no.: 2047

Replaces date: 2011-10-18

AVFETTING INDUSTRI OK 2047

1. PRODUCT AND COMPANY

- Approved for use
 Approved for laboratory use
 Modified by

| | |
|--------------------|----------------------------|
| TRADE NAME | AVFETTING INDUSTRI OK 2047 |
| APPLICATION | Alkaline defatting liquid. |
| Pr-nr. | 71119 |
| ART-NO | 2047 |

| | | | |
|----------------------------|--|-----------------|--|
| Producer/Importer | OK KJEMI Drammen AS | | |
| Address | Post-box 706 | | |
| Zip code & City | N-3003 Drammen | | |
| Country | Norway | | |
| Telephone | +47 32 80 10 70 | Fax | +47 32 80 00 10 |
| E-mail | ok@okkjemi.no | Internet | www.okkjemi.no |
| Contact person | Sven N. Karlsen | | |
| Issued by | Sven N. Karlsen | | |

| | | |
|----------------------------|-----------------|---------------------------|
| Emergency telephone | 110 | Fire |
| Emergency telephone | 112 | Police |
| Emergency telephone | 113 | Ambulance |
| Emergency telephone | -47 22 59 13 00 | Giftinformasjonssentralen |

2. HAZARD IDENTIFICATION



R-PHRASES

R-34 - Causes burns.

S-PHRASES

S-26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S-36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S-45 - In case of accident or if you feel unwell seek medical advice (show the label where possible).

S-60 - This material and its container must be disposed of as hazardous waste.

OTHER INFORMATION

Because of the high pH this product is marked corrosive

3. COPOSITION OF PRODUCT

| NO | Ingredients name | EC-NO | CAS-NO | Cons.(weight%) | Classification |
|----|----------------------------------|-----------|------------|----------------|----------------|
| 1 | Tetra Potassium Pyrophosphate | | 7320-34-5 | 5-10 | Xi, R36 |
| 2 | 2-(2-butoxyethoxy)ethanol | 203-961-6 | 112-34-5 | 5-10 | Xi, R36 |
| 3 | Alcohol ethoxylate | | | 5-10 | Xi, R41 |
| 4 | Sodium Gluconate | | 527-07-1 | 1-5 | IK- |
| 5 | Alkyl glucoside | | | 5-10 | Xi, R41 |
| 6 | Sodium Metasilicate pentahydrate | | 10213-79-3 | 1-5 | C, R34-R37 |
| 7 | Water | | 7732-18-5 | 60-100 | IK |

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, IK=No classification required, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Very flammable, Fo=Flammable, N=Dang. To the environment, Mut=Genotoxic, Sens=Sensitizing, Carc=Carcrogen, Repr=Causes birth defects.

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INGREDIENT COMMENTS

Contains 1,3% Phosphorus. Maximum allowed content of Phosphorus is 2,5% (industrially).

4. FIRST AID

GENERAL

Immediately move the patient from the source of exposure. Medical first aid if needed.

INHALATION

Low inhalation risk, except if the product is heated/burned. Immediately move the exposed person to fresh air. Provide fresh air, keep the patient warm and at rest. If symptoms persist, call a physician.

SKIN CONTACT

Flush skin with water. Wash skin thoroughly with soap and water. Remove contaminated clothing immediately. If symptoms persists, or in case of doubt, seek medical attention.

EYE CONTACT

Flush immediately with plenty of water, also under the eyelids. Get medical attention immediately. Continue to rinse.

INGESTION

Drink plenty of water or milk. Get medical attention if symptoms persist.

MEDICAL INFORMATION

Prophylactic treatment. Consult specialist.

5. FIRE FIGHTING MEASURES

PROPER FIREFIGHTER EQUIPMENT

Dry chemical, foam or carbon dioxide (CO₂)

FIRE AND EXPLOSION HAZARDS

Non-flammable

PERSONAL PROTECTION WHEN FIREFIGHTING

Use supplied-air respirator if substance is involved in fire. Be aware of gas in small fires.

6. ACCIDENTIAL RELEASE MEASURES

SAFETY MEASUREMENTS TO PROTECT PERSONS

Use the specified protective equipment.

SAFETY MEASUREMENTS TO PROTECT ENVIRONMENT

Biological degradable.

PROPER METHODS FOR DAMAGE LIMITATION AND CLEANUP

Do not let product enter drains. Contain spill with oil boom. Collect spillage in suitable containers and deliver to waste treatment plant. Inform Authorities if large amounts are involved.

OTHER INFORMATION

Collect spillage in suitable containers and deliver to waste treatment plant.

7. HANDLING AND STORAGE

HANDLING

None.

HANDLING ADVICE

Avoid spillage, skin and eye contact. Use suitable protective equipment..

STORAGE

Store above 0°C.

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8. EXPOSURE CONTROL AND PERSONAL PROTECTION

EXPOSURE CONTROL

Emergency shower and eyewash facilities must be available at the workplace.

RESP. PROTECTION

Not necessary under normal conditions.

EYE PROTECTION

Wear eye protection if there is a possibility of direct contact or splashes. If exposure to vapour causes irritation, wear mask.

HAND PROTECTION

Protective gloves are recommended if there is a risk of direct contact or splashes. Use gloves made of for instance neoprene or nitrile.

SKIN PROTECTION

Protective clothing should be worn if there is a possibility of direct contact or splashes.

OCCUPATIONAL EXPOSURE LIMITS

| Ingredient name | Cas-no. | Interval | ppm | mg/m3 | Ann. |
|---------------------------|----------|----------|------|-------|------|
| 2-(2-butoxyethoxy)ethanol | 112-34-5 | 8 hours | 10,0 | 68,0 | |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | | | |
|------------------------------|--------------------------------|--|----------------------|------------------|--|
| Form: | Liquid. | | | | |
| Colour: | Yellowish brown. Changing | | | | |
| Odour: | Slight odour of surfactants . | | | | |
| Solubility: | Very soluble in water. | | | | |
| Melting point/range: | - | | Density: | 1105 kg/m3(20°C) | |
| Expl. Limit LEL_UEL., %-%: | Solubility in water: | | | | |
| Vapor pressure: | Saturation conc.: | | | | |
| Decomposition temp.: | Rel. Density sat. Air (air=1): | | | | |
| pH Solution: | ~12 (5% solution) | | Boiling point/range: | | |
| Flash point: | pH concentrate: | | | ^~13 | |
| Molecular weight: | Viscosity: | | | | |
| Ignition temp: | Smelling limits lo-hi: | | | | |
| Rel. Vapor density, (air=1): | Rel. Evap. velocity.: | | | | |
| Air reactive: | Water reactive: | | | | |

10. STABILITY AND REACTIVITY

STABILITY

Normal stability.

11. TOXICOLOGICAL INFORMATION

INHALATION

Not known to cause damage to health at normal conditions. Inhalation of aerosol may cause irritation to the upper respiratory tract.

SKIN CONTACT

May burn the skin. Prolonged or repeated skin contact may cause cracked and dry skin

EYE CONTACT

May cause serious damage to eyes.

INGESTION

May cause burns to mucous membranes in mouth and throat, oesophagus and gastrointestinal system.

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12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL DATA

DEGRADATION

The product contains only readily biodegradable substances.

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request.

BIOACCUMULATION

Not expected to bioaccumulate. This product is biodegradable and soluble in water.

OTHER INFORMATION

Ingredient: Alkylglucoside

Ecotoxicological data

| | | | |
|------|----------|-------------------------|------------|
| LC50 | 96 hours | Oncorhynchus mykiss | 420 mg/l |
| EC50 | 48 hours | Daphnia magna | 490 mg/l |
| EC50 | 72 hours | Scenedesmus subspicatus | 180 mg/l |
| EC50 | 4 hours | Nitrifying bacteria | >1000 mg/l |

Ingredient: Alcohol ethoxylate

Ecotoxicological data

| | | | |
|------|----------|-------------------------|-----------|
| LC50 | 96 hours | Oncorhynchus mykiss | >10 mg/l |
| EC50 | 48 hours | Daphnia magna | 1-10 mg/l |
| EC50 | 72 hours | Scenedesmus subspicatus | 1-10 mg/l |

13. DISPOSAL

Dispose of as special waste in compliance with local and national regulations.

WASTEGROUP

7132 Detergents. EAK-code; See classification of hazardous waste.

14. TRANSPORT INFORMATION

GENERAL

Corrosive or slightly corrosive substance.

Classified as dangerous goods.

UN-no.: 1719

PROPER SHIPPING NAME:

Corrosive liquid, N.O.S. (Sodium metasilicate pentahydrate)

ADR/RID

| | | | |
|--------------|----|-----------------|-----|
| Class: | 8 | Packing group.: | III |
| Haz. id. no: | 80 | Label | 8 |

Tunnel restriction code (E)

15. REGULATORY INFORMATION

HEALTH

Due to the high pH this product is marked corrosive. Burns eyes and skin.

REFERENCES

The references below are from the Norwegian laws and regulations and EU regulations:

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Exposure limit(2011). List of Substances Product Regulations.. REACH Priority list annex XIV and XVII.
Manufacturer/importer. Regulation of classification, labeling, ETC of hazardous chemicals(2002).
Regulations of hazardous waste (2004). ADR/RID transport of dangerous goods (2011).Classification and labeling according to REACH EC No 1272/2008(CLP). Classification according to 1272/2008. REACH regulations art. 31 annex II.

CHEMICAL SAFETY ASSESSMENT

No specific information other than those given in this safety data sheet.

OTHER INFORMATION

The information support to current knowledge and experience. Safety Data Sheet describes the product with regard to safety requirements

16. OTHER INFORMATION

Full text of R-Phrases with no. Appearing in Section 2.

| | |
|------|-----------------------------------|
| R 34 | Causes burns. |
| R 36 | Irritating to eyes. |
| R 37 | Irritating to respiratory system. |
| R 41 | May cause serious damage to eyes. |

VENDOR NOTES

This product has registration number 71119 at "Produktregisteret" (Telephone +47 22 59 13 00).

Durable in locked original containers for 2 years from delivery date.

ISSUED: 1999-01-18

REVISION

| Version | Rev. date | Responsible | Changes |
|---------|------------|-------------|-------------------|
| 3.4.0 | 09/01/2008 | SNK | 4, 8, 11 |
| 3.4.1 | 17/01/2008 | SNK | 9 |
| 3.4.4 | 21.02.2011 | SNK | 2, 3 |
| 3.4.5 | 02.05.2011 | SNK | 2, 15 |
| 3.5.0 | 12.09.2011 | SNK | 2, 11, 14, 15, 16 |
| 3.5.1 | 18.10.2011 | SNK | 1, 8, 13, 15 |
| 3.5.2 | 25.10.2012 | SNK | 4, 6, 9, 15 |

SDS is issued by

| | |
|------------------------|---------------------|
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| Address | Post-box 706 |
| Zip code & City | 3003 Drammen |
| Country | Norway |
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| Internet | www.okkjemi.no |
| Telephone | +47 32 80 10 70 |
| Fax | +47 32 80 00 10 |
| Name : Sven N. Karlsen | |

This Safety Data Sheet is made according to our present knowledge, Norwegians regulations and manufacture's information. Matters that arise due to lack of information to us is beyond our control and must be answered for by the manufactures. The user's working conditions are beyond our control, and it will be the user's responsibility to take the necessary precautions. It is the individual recipient's responsibility to ensure that the information provided in this Safety Data Sheet is read and understood by all who use, handle, dispose or in any way come in contact with the product. This product should only be used for the purpose it was intended and in accordance with specific instructions.