



SAFETY DATA SHEET

VK 90

Safety data sheet according to Reg. 29204 / 13.12.2014

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

1.1 Identification of the substance / mixture

Product Name : VK 90
Chemical family : Liquid.

1.2 Identified uses of the substance / mixture and their non-recommended use

Industry : Heating System Cleaner & Descale

1.3 Safety Data Sheet supplier information

Producer/Supplier : KAMONO KİMYA TİC.LTD.ŞTİ.
Address : 19 Mayıs Mah. Turaboğlu Sk. H.Yazgan İş merkezi
No: 4 Kozyatağı / İstanbul
E-mail : info@kamono.com.tr
Telephone : +90 216 350 8747

1.4 Emergency telephone number

Emergency Phone : +90 216 350 8747
(Office hours 08:30-17:30)
National Poison Control phone : 114 (UZEM)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture According to SEA (28848);

Eye Dam. 2, H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label elements

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Hazard symbols



Warning Word:	Danger
Hazard statements	H319 - Causes serious eye irritation.
Precautionary statements	
Precaution	P264 -Wash hands thoroughly after handling. P280 - Wear protective gloves/ protective clothing/eye protection/ face protection.
Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/ attention.
Storage	No data available.
Disposal	No data available.
Additional label elements	No data available.

2.3 Other Hazard

No information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures : Mixture

Material name	Classification	Symbology identifiers	Value (%)
	SEA: RG.-11/12/2013 28848		
Citric Acid	Eye Dam. 2, H319	CAS : 77-92-9 EC : 201-069-1	45-55



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For the full text of the H-Statements mentioned in this Section, see Section 16

4. First Aid Measures

4.1 Description of first aid measures

- General advice** : Consult a physician. Show this safety data sheet to the doctor in attendance.
- Inhalation** : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- Skin contact** : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
- Eye contact** : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Ingestion** : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Significant signs and effects seen acutely and later

Known symptoms and effects are indicated on the label (see section 2.2 and / or section 11).

4.3 First signs for medical intervention and special treatment

Treatment : No information available.

5. Firefighting Measures

5.1 Fire extinguishers

- Suitable Extinguishing Media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable Extinguishing Media : No data available.

5.2 Specific hazards arising from the substance or mixture



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Hazardous from the Substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous Combustion Products : No data available.

5.3 Recommendations for fire fighting teams

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental measures

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for preservation and cleaning

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. 6

6.4 References to other sections

See section 1 for emergency contact information.

Refer to Section 8 for information on suitable personal protective equipment.

See Section 13 for additional information on disposal of wastes.

7. Handling and Storage

7.1 Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made



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from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

7.2 Conditions for safe storage with incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Certain end-uses

Advice : No information

Specific advice for the industrial sector : No information.

8. Exposure Controls / Personal Protection

8.1 Control parameters

Occupational exposure limits

No data available.

DNELs/DMELs

No DNELs/DMELs

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.



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Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory Equipment such as NIOSH (US) or CEN (EU).
- Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. 1 - 4 hours (breakthrough time): Recommended: Chemical-resistant gloves. (butyl rubber, neoprene, nitrile, polyvinyl chloride (PVC))
- Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Hygiene measures : Take off all contaminated clothing immediately.
- Protective measures : Avoid contact with skin and eyes.

Environmental exposure controls

- General advice : Do not flush into surface water or sanitary sewer system.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

- Physical State : Liquid
- Colour : Colourless
- Odour : Characteristic.



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Threshold of odour	: No information.
pH	: <1.50 (20°C)
Melting/freezing point	: No information.
Initial boiling point and boiling range	: No information.
Flash point	: Does not flash
Evaporation rate	: No information.
Flammability (solid,gas)	: No data available.
Combustion time	: No data available.
Combustion rate	: No data available.
Upper/lower flammability or explosive limits	: No data available.
Vapour pressure	: No data.
Vapour density	: No data.
Relative density	: No data.
Density	: 1.25 ± 0.05 g/cm ³ (20°C)
Solubility	: No data.
Solubility in water	: Miscible.
Partition coefficient n-octanol-water	: No data.
Ignition temperature	: No data.
Degradation temperature	: No data.
Viscosity	: No data.
Explosive properties	: No data.
Oxidizing properties	: No data.

9.2 Additional information

No data.

10. Stability and Reactivity

10.1 Reaction	: No data.
10.2 Chemical stability	: Stable under recommended storage conditions.
10.3 Hazardous reaction Probability	: No data available.



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- 10.4 Situations to avoid** : No data available.
10.5 Substances to avoid : No data available.
10.6 Harmful products : Hazardous decomposition products formed under fire conditions.

11. Toxicological Information

11.1 Information on toxic effects

- Acute toxicity : No data available.
Skin irritation : Mild irritation
Eye irritation : Mild irritation
Sensitisation : No data available.
Genotoxicity in vitro : No data available.
Genotoxicity in vivo : No data available.
Repeated dose toxicity : No data available.

12. Ecological Information

12.1 Toxicity

No data available.

12.2 Permanence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in the earth

Soil /Water distribution (K_{oc}) No data

Mobility No data

12.5 Results of PBT and vPvB evaluation

No data available.



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12.6 Other adverse effects

No data available.

13. Disposal Considerations

13.1 Waste treatment methods

Product

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

	ADR / RID	IMDG	IATA
14.1 UN number	-	-	-



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14.2 UN proper shipping name	Not dangerous good.	Not dangerous good.	Not dangerous good.
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

14.6 Special precautions for Use

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 MARPOL 73/78, Annexe II and : No data. Bulk transport by IBC code

15. Regulatory Information

15.1 Safety, health and environmental legislation specific to substance or mixture

By-Law on Preparation Safety Data Sheets of Substances and Mixtures [13.12.2014- 29204 official gazette]

By-Law on Classification, Labelling and Packaging of Substances and Mixtures [R.G. 11/12/2013-28848 – repeating]

By-Law on Transportation of Hazardous Substances by Highway [R.G. 24/10/2013-28801 official gazette]

15.2 Chemical Safety Assessment

Not applicable

16. Other Information



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Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation(EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

Full text of H-Statements referred to under sections 2 and 3.

H319 Causes serious eye irritation.

Revision statement

SEA is regulated according to the regulations.

Information Sources: Based on information sources from raw material producers.

These data sheet compliments the technical data sheet but doesn't replace it. The information and recommendations given are based on the best information that firm have and are believed accurate and reliable at the date publication. This safety data sheet should not be considered exhaustive and on no account does it exempt the user from ensuring that any property rights, existing laws and regulating are observed.