



DAF Kimya İç ve Dış Tic. A.Ş.

Mahmutbey mah. Taşocağı yolu cad.

Ağaoğlu Myoffice 212 sit. no : 3 / 75

Bağcılar / İstanbul Trade register no : 98265-5

Phone : +9 0212 803 41 78 - 79 & 90

E-mail : info@inknovators.com

SAFETY DATA SHEET

This safety data sheet has been prepared according to "The classification, labelling and packaging of substances and mixtures of T.C. Republic of Turkey Ministry of Environment and Urbanisation (Date : 13 December 2014, register no : 29204, CLP Regulation, EC 1272/2008)

Commercial Name : RD Retarder Agent

SDS No : 054

1. PRODUCT & COMPANY IDENTIFICATION :

- 1.1. Product Name** : **RD Retarder Agent**
- 1.2. Product Usage** : Water-based auxiliary materials that used to reduce viscosity of printing paste without any changing on their print property & fastness. It is antiembolic product.
- 1.3. Company Name** : DAF Kimya İç ve Dış Tic. A.Ş.
Address : Mahmutbey mah. Taşocağı yolu cad.
Ağaoğlu Myoffice 212 sit. no : 3 / 75
Bağcılar / İstanbul
- 1.4. Details of the supplier of the safety data sheet :**
Supplier Name : DAF Kimya İç ve Dış Tic. A.Ş.
Address : Mahmutbey mah. Taşocağı yolu cad.
Ağaoğlu Myoffice 212 sit. no : 3 / 75
Bağcılar / İstanbul
Phone : +9 0212 803 41 78 - 79 & 90
- 1.5. Emergency Phone** : +9 0533 150 15 14 (**7/24 hours**)
E- mail : info@inknovators.com
National Poison Center: 114 (for 24 hours)

2. HAZARDS IDENTIFICATION :

2.1. Classification of substance and Mixture :

Physical Hazards : Highly flammable liquid and vapour.

Health Hazards : Vapors/sprays avoid breathing. In case of inhalation: may cause respiratory tract irritation, harmful. Harmful if swallowed. Avoid exposure-obtain special instructions before use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If the victim don't feel good, immediately call the National poison control center (phone: 114) Seek medical attention immediately.

Use for protection, suitable protective clothing, gloves and eye/face Keep out of the reach of children and under lock and key.

Environment Hazards : Do not empty into drains. Dispose of contents/container in accordance with national regulation by licenced firms.

2.2. Label Elements:

Labelling according Regulation (EC) No 1272/2008 :

Harmfulness Statements : It is given in Section 16.

Precautionary statements : EUH210 safety data sheet can be provided on request.



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Pictogram : N/A

2.3. Other Hazards : N/A

3. COMPOSITION INFORMATION on HAZARDOUS INGREDIENTS :

Component	CAS No	EC No	Concentration (%)	Classification	Labeling
Acrylic copolymer based, special mix	Trade Secret	--	70-80%	Skin sens.1 H 317	P101, P333+P313, P280 H 317 GHS 07
Fixing Agent	Trade Secret	--	5-10%	--	--
Water	7732-18-5	231-791-2	--	--	--

4. FIRST AID MEASURES :

Inhalation : Get victim to fresh air. Give artificial respiration or oxygen if breathing has stopped. Get prompt medical attention. Do not give fluids if victim is unconscious. If the victim don't feel good, immediately call the National poison control center (phone: 114) Seek medical attention immediately.

Contact with Eyes : Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within 1 minute is essential to achieve maximum effectiveness. Seek medical attention immediately.

Contact with Skin : Immediately flush skin with plenty of water while removing contaminated clothing. Wash contaminated clothing before reuse. If redness or irritation occurs, seek medical attention.

Ingestion : Harmful if swallowed. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs, to open the airway of victim's and for prevent aspire, lean to the left side if possible (head down). Immediately consult a doctor with the product label (if possible)

5. FIRE FIGHTING MEASURES :

Extinguishers : Dry powder, carbon dioxide, alcohol-resistant foam. Avoid contact with the water.

Special hazards arising from the substance or mixture : Carbon oxides, nitrogen oxide

Extinguishing media : In case of needed, follow the Emergency Plan and take quarantine to environment, remove the staff around.

Special fire fighting equipment : Use gas mask for respiration, leakproof chemical goggles against the splash, fireproof gloves, boots and flame protective clothing.



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6. ACCIDENTAL RELEASE MEASURES :

Personal Precautions : Wear protective equipment. Immediately ventilate the contaminated area. Unprotected persons must move away from the contaminated area.

Environmental Precautions : If there is spillage, use general purpose absorbent/chemical kit for absorb the contaminated area. Do not empty into drains, prevent to contaminated other chemicals. Wash the contaminated area. Get informed the Authorities immediately.

Cleaning Methods : If possible, use chemical kit which is suitable to ingredient of this product. In case there is not a general-purpose absorbent / kit sure to absorb the chemical. Do not clean with water.

7. HANDLING and STORAGE :

Precautions for safe handling: Avoid spills. Don't Inhalation, avoid contact with eye and skin.

Usage : After use, especially when it comes into contact with the eyes and skin - your skin with plenty of water/wash your hands. (please see section 4) In case of needed, follow the Emergency Plan and take quarantine to environment, remove the staff around. No smoking.

Storage : This material and its container must be disposed of as hazardous waste . Keep container in a dry, cool well- ventilated place with original packaging . Take precautionary measures against static discharges. No smoking. It must be stored in accordance with the Legal laws. Attention should be paid to the warnings given on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION :

Occupational Exposure controls / personal protection:

Acrylic copolymer based, special mix :

Twa (8 hours) : 5 ppm ;

Stel (15 mins.) : 10 ppm

General hygiene and safety rules should be applied. The working environment must be eye shower (wash) station. Wash hands after working and end of day.

Engineering Measures : Well general ventilation should be used.

Accumulated chemical level in the air to reduce the acceptable limit, use the exhaust ventilation and/or use other engineering controls.

General hygiene and safety rules should be applied. The working environment must be eye shower (wash) station.



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Personal Protection Equipments :



Protection respiratory system : Gas masks with suitable filters to the chemical.

Protection Eye, face : Protective goggles against the risk of splash

Protection Skin, Body : May cause skin irritation and burns; use resistance gloves

Protection Hands : Use Fire and chemical resistant clothes

9. PHYSICAL and CHEMICAL PORPERTIES :

9.1.General Informations :

9.1.1. **Visual Appearance** : Clear paste

9.1.2. **Odor** : Characteristic

9.2.Important Health, Safety and Environmental Information :

pH : 6.0 – 7.0

Boiling Point /Range : >212°F (water)

Density : 1,11 g/cm³

Solubility : Soluble in water

10.STABILITY and REACTIVITY :

Stable under normal conditions, it is not reactive. Keep away from direct sunlight and keep it away from chemicals that are aggressive chemicals in the content. In case of overheating, can release chemical gases.

11.TOXICOLOGICAL INFORMATION :

Acute toxicity :

Acrylic copolymer based, special mix :

LD50 Oral - rat - 2.900 mg/kg

LC50 inhalation - rat - 4 h - 14,1 mg/l



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LD50 Dermal - rabbit - 2.335 mg/kg

LD50 Dermal - rabbit - 7.440 mg/kg Skin corrosion /irid.

Skin - skin irritation: no skin irritation (OECD 404 test instructions)

Serious damage/eye irritation Eyes - rabbit result: no eye irritation (OECD 405 test instruction)

Respiratory or skin sensitivity experiments in vivo - Mouse does not cause skin sensitization. (OECD 429 test instructions)

Non-hazardous limited evidence of carcinogenicity in animals studies IARC: 2B – Grup 2B

Other Toxicology Information :

Inhalation : May cause irritation and coughing

Contact with Skin : May cause irritation and cracking of the skin at long term effect

Contact with Eyes : May cause irritation therefore use suitable protective clothing, gloves, goggles, mask

Ingestion : In case of ingestion may cause harmful.

12.ECOLOGICAL INFORMATION :

Ecotoxicity : Toxic in the aquatic environment. Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheet

12.1. Toxicity

Acrylic copolymer based, special mix :

Toxicity on fish: LC50 - Pimephales promelas (Carp Cub) - 14 mg/l - 96 H EC - Pimephales promelas (Carp Cub) - 0,16 mg/l - 28 d (OECD test Instruction 212)

Toxicity to Daphnia and other aquatic invertebrates : EC50 - Daphnia Magna (water flea) - 12.6 mg/l - 48 h

Algae (algae) toxicity : NOEC - Pseudokirchneriella subcapitat (green) seaweed - 1,58 mg/l - 96 h (OECD test guideline 201) EC50 - Pseudokirchneriella subcapitat (green) seaweed - 12,7 m

Biodegradation :

Result: 82 - 98 % - readily biodegradable. (OECD test guideline 301c)12.2.

12.2. Persistence and degradability : Biodegradable : >70% , 28 day OECD 303 A

12.3. Bioaccumulative potential : This product doesn't make bioaccumulative



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12.4. Mobility in Soil: Soluble in water. This product can spread in the aquatic media.

12.5. PBT and vPvB evaluation results : The product does not contain any substances classified as PBT or vPvB.

12.6. Other negative effects : N/A

13. DISPOSAL CONSIDERATIONS :

Disposal/destruction : Waste of this product is sent to the recycling companies which are licenced from T.C. Republic of Turkey Ministry of Environment and Urbanisation with National Waste Form.

Waste Classification : European waste catalogue (ewc) code: 040216 Dyestuffs and pigments containing dangerous substances.

14. TRANSPORT INFORMATION :

ADR/RID : UN code : N/A, Classification : N/A

IMDG/IMO : UN code : N/A, Classification : N/A

IATA/ICAO : UN code : N/A, Classification : N/A

Packaging and transport information : The packaging must be closed tightly. keep it away from chemicals that are aggressive chemicals in the content.

Proposed special transport packaging : Determined by the manufacturer.

Environmental hazards: Environmentally hazardous/Marine pollutant.

Bulk carriage doesn't apply according to MARPOL 73/78, Annex II and IBC code.

15. REGULATORY INFORMATION :

15.1. Specific for the substance or mixture safety, health and environmental legislation :

National Legislations : Republic of Turkey Ministry of Environment and Urbanisation, 11 December 2013 on classification, labelling and packaging of substances and mixtures legislation

European Directive: [Regulation \(EC\) No 1272/2008](#), OJ L 353 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures - amending and repealing Directive 67/548/EEC and 1999/45/EC, and Regulation (EC) No 1907/2006.

Guide :

UNECE (United Nations Economic Commission for Europe) :

https://www.unece.org/fileadmin/DAM/trans/danger/publi/ghs/ghs_rev02/English/08e_annex4.pdf

[ECHA](#) (European Chemical Agency) :

<http://echa.europa.eu/web/guest/regulations/clp>



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16. OTHER INFORMATIONS :

Hazard Statements :

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary Statements :

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. [As modified by IV ATP[5]]

P261: Avoid breathing dust/fumes/gas/mist/vapours/spray. [As modified by IV ATP].

P280 : Wear protective gloves/protective clothing/eye protection/face protection. [As modified by IV ATP]

P301 + P312 + P330 : IF SWALLOWED: Call a National POISON CENTER (114 number phone) /doctor/.../if you feel unwell. [As modified by IV ATP]. Rinse mouth.

P304 + P340+P312 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/ doctor/.../if you feel unwell. [As modified by IV ATP]

P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P403 + P235: Store in a well ventilated place. Keep cool.

Pictograms / Symboles: N/A

Additional Information :

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Information of this safety data sheet is taken from UNECE (United Nations Economic Commission for Europe) and only for informational. The warnings are given on this safety data sheet is for use outside the manufacturer/distributor to direct/indirect can not be held responsible for any loss or damage.



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History of Revision :

Rev. No	Rev. Date	Revision Details
0	January 2016	First Issue
1	March 2016	R & S Statements are removed according to Regulation (EC) No 1272/2008