

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH Annex II)



THD200

SUBID : 000001011961

Version 1

Print Date 04.01.2016

Revision Date 04.06.2014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or mixture:

Product name : THD200
REACH Registration No : Registration numbers of the individual components: see section 3.2, if applicable.

1.2 Use of the substance/mixture:

Identified relevant uses : Offset plate developer solution
Uses advised against : Do not use for products which come into direct contact with food stuffs. Do not use for products which come into direct contact with the skin. Do not use for private purposes (household).

1.3 Company/undertaking identification

Agfa-Gevaert Ltd.
Vantage West
Great West Road
Brentford, Middlesex TW8 9AX
United Kingdom
Tel. : +44 (0)20 8 231 4616
Fax : +44 (0)20 8 231 4951
E-mail: electronic.sds@agfa.com

1.4 Emergency telephone

Emergency telephone number (Belgium) : +32 3 4443333 (24h/24h)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Regulation(EC) No 1272/2008 (CLP)	
• Hazard classes	Skin irritation
Hazard categories	Category 2
Hazard statements	H315
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Serious eye damage
Hazard categories	Category 1
Hazard statements	H318
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.

67/548/EEC or 1999/45/EC	
Hazards characteristics	Irritant
R-phrases(s)	R36/38

Full text of each relevant R and H phrase is listed in section 16.

2.2 Label elements:

Hazardous components which must be listed on the label :

- CAS-No. : 6834-92-0 Disodium metasilicate

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Symbol(s)



GHS05

Signal word	: DANGER	
Hazard statements	: H318	Causes serious eye damage.
	: H315	Causes skin irritation.
Precautionary statements: prevention	: P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements: response	: P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing.
	: P310	Immediately call a POISON CENTER/doctor/#

2.3 Other hazards:

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:

Aqueous offset plate developer solution, mainly consisting of:

3.2 Hazard ingredients:

The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 2.1.

Hazardous components in the meaning of regulation(EC) No 1272/2008 (CLP)

- Disodium metasilicate Concentration [%] : 3.0 - 5.0
CAS-No. : 6834-92-0
Index-No. : 014-010-00-8
EINECS-No. : 229-912-9
REACH Registration No : 01-2119449811-37-XXXX
Hazard classes : Corrosive to metals., Skin corrosion, Serious eye damage, Specific target organ toxicity - single exposure
Hazard categories : Category 1, Category 1B, Category 1, Category 3
Hazard statements : H290, H314, H318, H335
- Sodium octanoate Concentration [%] : 1.0 - 5.0
CAS-No. : 1984-06-1
EINECS-No. : 217-850-5
REACH Registration No : Transition time according to REACH regulation article 23 is still not expired.
Hazard classes : Serious eye irritation, Skin irritation, Specific target organ toxicity - single exposure
Hazard categories : Category 2, Category 2, Category 3
Hazard statements : H319, H315, H335

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Hazardous components in the meaning of 67/548/EEC or 1999/45/EC

- Disodium metasilicate Concentration [%] : 1.0 - 5.0
CAS-No. : 6834-92-0
Index-No. : 014-010-00-8
EINECS-No. : 229-912-9
Symbol(s) : C
R-phrases) : R34, R37
- Sodium octanoate Concentration [%] : 1.0 - 5.0
CAS-No. : 1984-06-1
EINECS-No. : 217-850-5
Symbol(s) : Xi
R-phrases) : R36/37/38

Components with a community workplace exposure limit

This product does not contain components with a community exposure limit.

3.3 Remark:

Full text of each relevant R and H phrase is listed in section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures:

- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
- Ingestion : Rinse mouth with plenty of water. Seek medical advice.
- Inhalation : Take person to fresh air. If necessary, seek medical advice.

4.2 Most important symptoms and effects:

- Symptoms : Causes skin irritation. Risk of serious damage to eyes.

4.3 Indication of immediate medical attention and special treatment needed:

- General advice : Call a physician immediately.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing media : Dry extinguishing powder., Alcohol-resistant foam., Carbon dioxide (CO₂)., Water.

5.2 Special hazards arising from the substance or mixture:

- Specific hazards during fire fighting : Cool closed containers exposed to fire with water spray. Do not use a solid water stream as it may scatter and spread fire.
- Further information : Product is not combustible. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.3 Advice for fire-fighters:

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Special protective equipment : Regular fire intervention clothes.
for fire-fighters

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions : See section : Exposure controls / personel protection. Cleanup personnel must use appropriate personal protective equipment.
Additional advice : Observe normal precautions when handling chemicals.

6.2 Environmental precautions:

Environmental precautions : For waste disposal see section 13. The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and material for containment and cleaning up:

Methods for cleaning up : Dike the spill if necessary. Soak up with absorbent material. Collect large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water.

6.4 Reference to other sections:

For waste disposal see section 13.
For personal protection see section 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.Prevent product from diffusing.
Hygiene measures : Observe normal precautions when handling chemicals.Keep away from foodstuffs, drinks and tobacco.Emergency showers and eye wash stations should be available.Employees should wash their hands and face before eating, drinking, or using tobacco products.
Advice on protection against fire and explosion : No special protective measures against fire and explosion required.

7.2 Conditions for safe storage:

Requirements for storage : Keep container tightly closed. Protect from direct sunlight.Protect against light.Store in cool place.
Further information on storage : Store in a cool area.Store in a dry area.Keep container in a well-ventilated place.
Advice on common storage : Store away from strong acids.

7.3 Specific end use:

This substance is used only by trained professionals under restricted conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

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8.1.1 Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring:

8.1.1.1 Occupational exposure limits:

Air limit values

We are not aware of any national exposure limit.

Biological limit values

We are not aware of any national exposure limit.

8.1.1.2 Additional exposure limits under the conditions of use:

No other exposure limits applicable.

8.1.1.3 DNEL/DMEL and PNEC-values:

DNEL

No Chemical Safety Report performed. No DNEL/DMEL value determined.

PNEC

No Chemical Safety Report performed. No PNEC value determined.

8.2 Exposure controls:

Occupational exposure controls:

➤ Instruction measures to prevent exposure:

Employees should wash their hands and face before eating, drinking, or using tobacco products. Keep away from foodstuffs, drinks and tobacco.

➤ Technical measures to prevent exposure:

Ensure adequate ventilation.

➤ Personal measures to prevent exposure:

- Hand protection : Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness \geq 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness \geq 0.38 mm, breakthrough time > 480 min) or neoprene (thickness \geq 0.65 mm, breakthrough time > 240 min). For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used. Avoid gloves made of: natural latex.
- Eye protection : Safety goggles. EN 166.
- Body Protection : Safety clothes.
- Personal protective equipment : Prevent product from diffusing. Observe normal precautions when handling chemicals.

Environmental exposure controls:

Effluent regulations/discharge/treatment/contents may vary from one area to another. Please consult the local regulations regarding the disposal of this material. Do not release into drain. Collect for removal by a licensed waste contractor.

EU Directive	Status
European Directive 2000/60/EC (water)	not on list
European Directive 1996/62/EC (air)	not on list

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

State of matter	:	Liquid
Form	:	Liquid.
Color	:	Colourless.
Odor	:	Odourless.
Odor threshold	:	No data available

9.1.2 Important health, safety and environmental information:

pH (25 °C)	:	> 13	Method: Literature.
Melting point/range	:	< 0 °C	Method: Literature.
Boiling point/range	:	> 100 °C	Method: Literature.
Flash point	:	> 93.33 °C	Method: Literature.
		Not combustible.	
Autoignition temperature	:	Not applicable	
Vapour pressure	:	No data available	
Relative vapour density	:	Not applicable	
Relative density (20 °C)	:	1.064	Method: Literature.
Solubility/qualitative	:	Miscible with water at all ratios.	
Partition coefficient (n-octanol/water)	:	No data available	
Viscosity, dynamic	:	No data available	
Viscosity, kinematic	:	No data available	
Lower explosion limit	:	Not applicable	
Upper explosion limit	:	Not applicable	
Evaporation rate	:	Almost no evaporation (20°C).	
Flammability (solid, gas)	:	Not applicable	

9.2 Other information:

VOC content	:	Not applicable
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10. STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity	:	Reacts with acids.
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10.2 Chemical stability:

Stability	:	The product is stable under normal conditions of storage and use.
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10.3 Possibility of hazardous reactions:

Hazardous reactions	:	Reacts with strong acids.
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10.4 Conditions to avoid:

Conditions to avoid	:	Avoid contact with strong acids. Remove all chemicals and rinse the processing tanks thoroughly with water before using any cleansing products.
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10.5 Materials to avoid:

Materials to avoid : Reacts with strong acids.

10.6 Hazardous decomposition products:

Hazardous decomposition products : No specified dangerous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicokinetics, metabolism and distribution:

Acute effects (toxicity tests):

➤ Acute Toxicity

- Disodium metasilicate

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	1,152 to 1,349 mg/kg	Literature.
Acute dermal toxicity	LD50	rat	> 5,000 mg/kg	Literature.
Acute inhalation toxicity	LC50	rat	> 2.06 mg/l	Literature.

- Sodium octanoate

	Effect dose	Species	Value	Method
Acute oral toxicity	No data available			
Acute dermal toxicity	No data available			
Acute inhalation toxicity	No data available			

➤ Specific target organ toxicity (STOT):

- Disodium metasilicate

Specific effects	Affected organs
Irritating to respiratory system.	

- Sodium octanoate

Specific effects	Affected organs
No data available	

➤ Irritant and corrosive effects:

	Exposure time	Species	Evaluation	Method
Primary irritation to the skin		rabbit	Irritating to skin.	OECD Test Guideline 404

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Irritation to eyes	rabbit	Risk of serious damage to eyes.	OECD Test Guideline 405
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➤ **Irritation to the respiratory tract:**

- Disodium metasilicate
May cause irritation of respiratory tract.

- Sodium octanoate
No data available

➤ **Sensitisation:**

- Disodium metasilicate

Species	Evaluation	Method
	Did not cause sensitization on laboratory animals.	Literature.

- Sodium octanoate

Species	Evaluation	Method
	No data available	

➤ **Aspiration hazard:**

- Disodium metasilicate
Based on available data, the classification criteria are not met.

- Sodium octanoate
No data available

Sub-acute, sub-chronic and chronic toxicity

➤ **Repeated dose toxicity:**

- Disodium metasilicate
Irritating to respiratory system.

- Sodium octanoate
No data available

➤ **Specific target organ toxicity (STOT):**

No information available.

➤ **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

- **Carcinogenicity**

- Disodium metasilicate
Based on available data, the classification criteria are not met.

- Sodium octanoate
No carcinogenic effects observed at the doses tested.

- **Mutagenicity**

- Disodium metasilicate

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There is no evidence for mutagenicity from studies in animals.

- Sodium octanoate

There is no evidence for mutagenicity from studies in animals.

- **Genetic toxicity in vitro**

- Disodium metasilicate

Type	Test system	Concentration	Result
	Method: Literature. Based on available data, the classification criteria are not met.		

- Sodium octanoate

No data available

- **Genetic toxicity in vivo**

- Disodium metasilicate

Route of exposure	Species	Exposure time	Result
	Method: Literature. Based on available data, the classification criteria are not met.		

- Sodium octanoate

No data available

- **Teratogenicity**

No data available

- **Toxicity to reproduction**

- Disodium metasilicate

Route of exposure	Species	Exposure time
	rat Method: Literature. Based on available data, the classification criteria are not met.	
	mouse Method: Literature. Based on available data, the classification criteria are not met.	

- Sodium octanoate

No data available

➤ **Summarised evaluation of the CMR properties:**

- Disodium metasilicate

Carcinogenicity : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Teratogenicity : Based on available data, the classification criteria are not met.
Toxicity to reproduction : No data available

- Sodium octanoate

Carcinogenicity : Animal testing did not show any carcinogenic effects.
Mutagenicity : Did not show mutagenic effects in animal experiments.
Teratogenicity : No data available
Toxicity to reproduction : No data available

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Experiences made in practice:

There is no data available for this product.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

- Disodium metasilicate

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Brachidanio rerio (zebra fish)	210 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to daphnia	EC50	48 h	Daphnia magna	1,700 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to algae	EC50	72 h	Scenedesmus subspicatus (algae)	207 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to bacteria	No data available			

- Sodium octanoate

	Effect dose	Exposure time	Species	Value
Toxicity to fish	No data available			
Toxicity to daphnia	No data available			
Toxicity to algae	No data available			
Toxicity to bacteria	No data available			

12.2 Persistence and degradability:

Physico-chemical removability

Neutralization is normally necessary before waste water is discharged into water treatment plants.

Chemical Oxygen Demand (COD)

No data available

Adsorbed organic bound halogens (AOX)

- Disodium metasilicate

Product does not contain any organic halogens.

- Sodium octanoate

Product does not contain any organic halogens.

Biodegradation

The methods for determining the biological degradability are not applicable to inorganic substances.

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Biochemical Oxygen Demand (BOD)

No data available

12.3 Bioaccumulative potential:

Partition coefficient (n-octanol/water)

No data available

Bioconcentration factor (BCF)

Bioaccumulation is unlikely.

12.4 Mobility in soil:

Soluble in water.

Henry's constant

Value	Temperature	Method
		No information available.

Transport between environmental compartments

Transport between environmental compartments can be expected.

12.5 Results of PBT and vPvB assessment:

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

12.6 Other adverse effects:

This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Waste disposal methods

Do not release into drain. Collect for removal by a licensed waste contractor. Effluent regulations/discharge/treatment/contents may vary from one area to another. Please consult the local regulations regarding the disposal of this material.

May be discharged to drain if local regulations permit.

Empty containers.

As the packaging can be contaminated with product residus, please observe the warnings of the label even when the container is empty. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

For waste resulting from the expired product, it is recommended to use European Waste Code : 09 01 02 (water-based offset plate developer solutions).

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14. TRANSPORT INFORMATION

Not regulated according to ADR.
Not regulated according to ADNR.
Not regulated according to RID.
Not regulated according to IMO/IMDG.
Not regulated according to ICAO/IATA aircraft only.
Not regulated according to ICAO/IATA passenger and cargo aircraft.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Authorisation and/or restriction on use

Authorisation : No
Restriction on use : Not listed on EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixtures & articles (Reg 1907/2006/EC, as amended)

Other EU regulations

Does not fall under specific EU-Regulations.

15.2 Chemical Safety Assessment

No Chemical Safety Report needed according REACH.

16. OTHER INFORMATION

Text of H-phrases referred to under headings 2 and 3:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Text of R-phrases referred to under headings 2 and 3:

R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.

Further information

This Safety Data Sheet is compiled in accordance with European Directives and corresponding national legislation.

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The information disclosed in this Safety Data Sheet is believed to be correct to the best of our current knowledge and experience. It only relates to the specific product designated herein and it may not be valid when said product is used in combination with any other material or in any process, unless specified in the text. This document aims to provide the necessary health and safety information of the product and is not to be considered a warranty or quality specification. It is the responsibility of the user to comply with local legislation relating to safety, health, environment and waste management.

Sources of key data used to compile the datasheet

Handbuch der gefährlichen Güter, Hommel.

The Dictionary of Substances and their Effects, Royal Society of Chemistry.

Gefährliche Chemische Reaktionen, L.Roth und U.Weller.

Handbuch der Umweltgifte, Dauderer.

Chemiekaarten, latest version.

Safety Data Sheet from the supplier. This safety data sheet contains an ES (if applicable) in an integrated form.

Contents of the exposure scenario have been included (if applicable) into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet. The downstream user has to check whether his uses are covered by the integrated ES information in this safety data sheet.

Abbreviations

ADR:	Accord européen relatif au transport international des marchandises Dangereuses par Route
ADNR:	Accord européen relatif au transport international des marchandises Dangereuses par la Rhin
AGW:	Arbeitsplatzgrenswerte (GE)
ATEmix:	Acute toxicity estimate of the mixture
CLP:	Classification, Labelling and Packaging of substances and mixtures
CMR:	Carcinogène
DNEL:	Derived No Effect Level
EC0:	Effective Concentration 0%
EC5:	Effective Concentration 5%
EC10:	Effective Concentration 10%
EC50:	Median Effective Concentration
EC100:	Effective Concentration 100%
EH40 WEL:	Workplace Exposure Limit (UK)
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
IC50:	inhibitory concentration 50%
IMDG:	International Maritime Dangerous Goods
IMO:	International Maritime Organization
IUCLID:	International Uniform Chemical Information Database
LC50:	Lethal Concentration 50%
LC100:	Lethal Concentration 100%
LOAEL:	Lowest Observed Adverse Effect Level
LDL0	Lethal Dose (minimum found to be lethal)
LD50:	Lethal Dose 50%
MAC:	Maximaal Aanvaardbare Concentratie (NL)
MAK:	Maximale Arbeitsplatz-Konzentration
NOAEL:	No Observed Adverse Effect Level
NOEL:	No Observed Effect Level
NOEC:	No Observed Effect Concentration
OEL:	Occupational Exposure Limit
PBT:	Persistent, Bioaccumulative and Toxic substance

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PNEC:	Predicted No Effect Concentration
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID:	Regulations concerning the International Transport of Dangerous Goods by Rail
STEL:	Short Term Exposure Limit
TLV:	Threshold Limit Value
TRGS900:	Arbeitsplatzgrenswerte (GE)
TWA:	Time Weighted Average
VOC:	Volatile Organic Compound
vPvB:	very Persistent and very Bioaccumulative substance