

: GHS product identifier

: Supplier's details

SAFETY DATA SHEET

Ceilcote 282 Flakeline BC Grey Part A

Section 1. Identification

Ceilcote 282 Flakeline BC Grey Part A

NCA031 : Product code

Identified uses			
Professional application of coatings and inks			
Uses advised against Reason			
All Other Uses			

AkzoNobel Saudi Arabia Ltd.

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Tel: +966 3 812 1044 Fax: +966 3 812 1169

+966 3 812 1044 : **Emergency telephone**

number (with hours of

operation)

: National advisory body/
Poison Centre (For use only

by licensed medical professionals.)

sdsfellinguk@akzonobel.com : e-mail address of person responsible for this SDS

Section 2. Hazards identification

FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 1

: Classification of the substance or mixture

GHS label elements







: Hazard pictograms

: Hazard statements

Danger : Signal word

Flammable liquid and vapour.

Harmful if inhaled.

Causes serious eye irritation.

Causes skin irritation.

Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated exposure. (hearing organs)

Precautionary statements

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Section 2. Hazards identification

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapour. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Do not breathe gas, vapour or spray.

Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Store locked up. Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Wear appropriate respirator when ventilation is inadequate.

: Prevention

: Response

: Storage: Disposal

: Supplemental label

elements

None known. : Other hazards which do not

result in classification

Section 3. Composition/information on ingredients

Mixture : Substance/mixture

Classification	CAS number	% by weight	Ingredient name
Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 2, H361 (Unborn child) STOT RE 1, H372 (hearing organs)	100-42-5	≥25 - ≤50	styrene

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

<u>Description of necessary first aid measures</u>

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

: Eye contact

: Inhalation

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Section 4. First aid measures

waistband.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

: Skin contact

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

: Ingestion

Most important symptoms/effects, acute and delayed

Potential acute health effects

Causes serious eye irritation. : Eye contact
Harmful if inhaled. : Inhalation
Causes skin irritation. : Skin contact
Irritating to mouth, throat and stomach. : Ingestion

Over-exposure signs/symptoms

Adverse symptoms may include the following: : Eye contact

pain or irritation watering

redness

Adverse symptoms may include the following: : Inhalation

headache

drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Skin contact

irritation redness reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Ingestion

reduced foetal weight increase in foetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically. Contact poison treatment specialist immediately if large : **Notes to physician** quantities have been ingested or inhaled.

No specific treatment. : S

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

: Specific treatments

: Protection of first-aiders

See toxicological information (Section 11)

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Section 5. Firefighting measures

Extinguishing media

Use dry chemical, CO₂, water spray (fog) or foam.

Do not use water jet.

: Suitable extinguishing media

: Unsuitable extinguishing media

Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides

: Specific hazards arising from the chemical

: Hazardous thermal decomposition products

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

: Special protective actions for fire-fighters

: Special protective equipment for fire-fighters

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

: For non-emergency personnel

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

: For emergency responders

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

: Environmental precautions

Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and : Small spill explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and : Large spill explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - : Protective measures obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

: Advice on general occupational hygiene

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Vapours are heavier than air and may spread along floors. Separate from oxidizing materials. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

: Conditions for safe storage, including any incompatibilities

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Exposure limits	Ingredient name
ACGIH TLV (United States, 3/2015).	styrene
Absorbed through skin.	
STEL: 170 mg/m³ 15 minutes.	
STEL: 40 ppm 15 minutes.	
TWA: 85 mg/m³ 8 hours.	
TWA: 20 ppm 8 hours.	

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

: Appropriate engineering controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

: Environmental exposure controls

Individual protection measures

Wash hands, forearms and face thoroughly after handling chemical products, before : Hygiene measures eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Section 8. Exposure controls/personal 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.

: Eye/face protection

Skin protection

Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/ puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

: Hand protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

: Body protection

: Other skin protection

: Respiratory protection

Section 9. Physical and chemical properties

Appearance

Not available.

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Liquid. : Physical state

Grey. Colour Sweetish. : Odour

Not available. Odour threshold

Not applicable. нα

Not available.

: Melting point Lowest known value: 145°C (293°F) (styrene). : Boiling point

Closed cup: 34°C (93.2°F) : Flash point

Not available. : Evaporation rate

Not available. : Flammability (solid, gas) Greatest known range: Lower: 0.9% Upper: 6.8% (styrene)

: Lower and upper explosive

: Vapour pressure

(flammable) limits

Not available. : Vapour density

1.27 : Relative density Insoluble in the following materials: cold water. : Solubility

Not available. : Partition coefficient: n-

octanol/water

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Section 9. Physical and chemical properties

Not available. : Auto-ignition temperature

Not available. : Decomposition temperature

Kinematic (room temperature): 2635 mm²/s (2635 cSt) : Viscosity

Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients. : Reactivity

The product is stable. : Chemical stability

Under normal conditions of storage and use, hazardous reactions will not occur. : Possibility of hazardous

reactions

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Conditions to avoid

Reactive or incompatible with the following materials:

oxidizing materials

: Incompatible materials

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Hazardous decomposition

products

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Exposure	Dose	Species	Result	Product/ingredient name
4 hours	2770 ppm 11800 mg/m³ 2650 mg/kg	Rat Rat Rat	LC50 Inhalation Gas. LC50 Inhalation Vapour LD50 Oral	styrene

Irritation/Corrosion

Observation	Exposure	Score	Species	Result	Product/ingredient name
-	50 parts per million	-	Human	Eyes - Mild irritant	styrene
-	24 hours 100 milligrams	-	Rabbit	Eyes - Moderate irritant	
-	100 milligrams	-	Rabbit	Eyes - Severe irritant	
-	500 milligrams	-	Rabbit	Skin - Mild irritant	
-	100 Percent	-	Rabbit	Skin - Moderate irritant	

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

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Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Target organs	Route of exposure	Category	Name
hearing organs	Not determined	Category 1	styrene

Aspiration hazard

Not available.

Not available. : Information on likely routes

of exposure

Potential acute health effects

Causes serious eye irritation. : Eye contact
Harmful if inhaled. : Inhalation
Causes skin irritation. : Skin contact
Irritating to mouth, throat and stomach. : Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following: : Eye contact

pain or irritation

watering redness

Adverse symptoms may include the following:

: Inhalation

headache

drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness reduced foetal weight

increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Skin contact

irritation redness

reduced foetal weight increase in foetal deaths skeletal malformations

Adverse symptoms may include the following: : Ingestion

reduced foetal weight increase in foetal deaths skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Not available. : Potential immediate

effects

Not available. : Potential delayed effects

Long term exposure

Not available. : Potential immediate

effects

Not available. : Potential delayed effects

Potential chronic health effects

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: General

Section 11. Toxicological information

Not available.

Causes damage to organs through prolonged or repeated exposure.

No known significant effects or critical hazards. : Carcinogenicity

No known significant effects or critical hazards. : Mutagenicity

Suspected of damaging the unborn child. : Teratogenicity

No known significant effects or critical hazards. : Developmental effects

No known significant effects or critical hazards. : Fertility effects

Numerical measures of toxicity

Acute toxicity estimates

ATE value	Route
	Inhalation (gases) Inhalation (vapours)

Section 12. Ecological information

Toxicity

Exposure	Species	Result	Product/ingredient name
72 hours	Algae - Pseudokirchneriella subcapitata	Acute EC50 1400 μg/l Fresh water	styrene
96 hours	Algae - Pseudokirchneriella subcapitata	Acute EC50 720 μg/l Fresh water	
48 hours	Daphnia - Daphnia magna	Acute EC50 4700 to 7400 μg/l Fresh water	
48 hours	Crustaceans - Hyalella azteca	Acute LC50 13000 µg/l Fresh water	
96 hours	Fish - Lepomis macrochirus	Acute LC50 4.7 mg/l Fresh water	
96 hours	Algae - Pseudokirchneriella subcapitata	Chronic NOEC 63 µg/l Fresh water	

Persistence and degradability

Not available.

Bioaccumulative potential

Potential	BCF	LogP _{ow}	Product/ingredient name
low	13.489628825	0.35	styrene

Mobility in soil

Not available. : Soil/water partition coefficient (Koc)

No known significant effects or critical hazards. : Other adverse effects

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Section 13. Disposal considerations

The generation of waste should be avoided or minimised 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 non-recyclable 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. 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

: Disposal methods

Section 14. Transport information

IATA	IMDG	UN	
UN1263	UN1263	UN1263	UN number
PAINT	PAINT	PAINT	UN proper shipping name
3	3	3	Transport hazard class(es)
III	III	III	Packing group
No.	No.	No.	Environmental hazards
-	-	-	Additional information

Not applicable. : IMDG Code Segregation group

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.

: Special precautions for user

Not available.

: Transport in bulk according to Annex II of Marpol and the IBC Code

Section 15. Regulatory information

No known specific national and/or regional regulations applicable to this product (including its ingredients).

: Safety, health and environmental regulations specific for the product

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Section 16. Other information

Justification

Justification	Classification
On basis of test data	Flam. Liq. 3, H226
Calculation method	Acute Tox. 4, H332
Calculation method	Skin Irrit. 2, H315
Calculation method	Eye Irrit. 2A, H319
Calculation method	Repr. 2, H361 (Unborn child)
Calculation method	STOT RE 1, H372 (hearing organs)

History

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revision

No previous validation : Date of previous issue

1 : Version

ATE = Acute Toxicity Estimate : Key to abbreviations

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Not available. : References

Indicates information that has changed from previously issued version.

Notice to reader

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

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