

# **SAFETY DATA SHEET**

FRS-40 SEMI-GLOSS BASE STAR SILVER 42 PH3/7223

## **Section 1. Identification**

GHS product identifier : FRS-40 SEMI-GLOSS BASE STAR SILVER 42 PH3/7223

**SDS code** : 40927223B

#### Recommended use of the chemical and restrictions on use

Identified uses

Paint. Professional use Industrial use

Restrictions on use

All other uses

**Product use** : Solvent borne coating for interior use.

Supplier's details

MAPAERO SAS

10, Avenue de la Rijole CS30098

09103 PAMIERS Cedex

France

e-mail address of person

responsible for this SDS

: +33 (0)5 34 01 34 01

: PSRA PAMIERS@akzonobel.com

**Emergency telephone** 

number +33 (0)5 61 60 23 30

## Section 2. Hazard identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

**CARCINOGENICITY - Category 2** 

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

**GHS label elements** 

Hazard pictograms :







Signal word : Warning

**Hazard statements**: Flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.

**Precautionary statements** 

Date of issue/Date of revision : 1-10-2022 Version : 1

Date of previous issue : No previous validation 1/14 AkzoNobel

## Section 2. Hazard identification

#### Prevention

: Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapor. Wash hands thoroughly after handling.

#### Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. 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 advice or attention.

**Storage** 

: Store in a well-ventilated place. Keep container tightly closed. Keep cool.

**Disposal** 

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

Other hazards which do not : None known. result in classification

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
n-butyl acetate	≥25 - ≤50	123-86-4
2-methoxy-1-methylethyl acetate	≥10 - ≤25	108-65-6
xylene	≥10 - <20	1330-20-7
4-methylpentan-2-one	≤5	108-10-1
ethylbenzene	≤3	100-41-4
Naphtha (petroleum), hydrotreated heavy	≤3	64742-48-9

There are no additional 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

#### Description of necessary first aid measures

Eye contact

: 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.

Inhalation

: 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 waistband.

Skin contact

: 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.

: 1-10-2022 Date of issue/Date of revision Version : 1

**AkzoNobel** Date of previous issue : No previous validation 2/14

## Section 4. First aid measures

## Ingestion

: 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. If necessary, call a poison center or physician. 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.

### Most important symptoms/effects, acute and delayed

## Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

**Skin contact**: Causes skin irritation.

**Ingestion**: Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation

watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

irritation redness

**Ingestion**: No specific data.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

**Protection of first-aiders**: 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.

#### See toxicological information (Section 11)

# Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

media

Unsuitable extinguishing

media

: Do not use water jet.

Date of issue/Date of revision : 1-10-2022 Version : 1

Date of previous issue : No previous validation 3/14 AkzoNobel

# Section 5. Fire-fighting measures

### Specific hazards arising from the chemical

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

## **Hazardous thermal** decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide metal oxide/oxides

## Special protective actions for fire-fighters

: 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.

## Special protective equipment for fire-fighters

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

## Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

### For non-emergency personnel

: 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### For emergency responders:

If specialized 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".

#### **Environmental precautions**

: Avoid dispersal of spilled 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).

#### Methods and materials for containment and cleaning up

#### Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and 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.

#### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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

: 1-10-2022 Version: 1 Date of issue/Date of revision 4/14

Date of previous issue : No previous validation **AkzoNobel** 

# Section 7. Handling and storage

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.

#### Advice on general occupational hygiene

: 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.

# including any incompatibilities

Conditions for safe storage, : 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. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**AkzoNobel** 

# Section 8. Exposure controls/personal protection

#### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
n-butyl acetate	EU OEL (Europe, 10/2019). Notes: list of indicative occupational exposure limit values  STEL: 150 ppm 15 minutes.  STEL: 723 mg/m³ 15 minutes.  TWA: 241 mg/m³ 8 hours.  TWA: 50 ppm 8 hours.
2-methoxy-1-methylethyl acetate	EU OEL (Europe, 2/2017). Absorbed through skin. Notes: list of indicative occupational exposure limit values  TWA: 50 ppm 8 hours.  TWA: 50 ppm 8 hours.  TWA: 50 ppm 8 hours.  STEL: 100 ppm 15 minutes.  STEL: 550 mg/m³ 15 minutes.
xylene	EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values  STEL: 442 mg/m³ 15 minutes.  STEL: 100 ppm 15 minutes.  TWA: 221 mg/m³ 8 hours.  TWA: 50 ppm 8 hours.
4-methylpentan-2-one	EU OEL (Europe, 10/2019). Notes: list of indicative occupational exposure limit values  STEL: 208 mg/m³ 15 minutes.  STEL: 50 ppm 15 minutes.  TWA: 83 mg/m³ 8 hours.  TWA: 20 ppm 8 hours.
ethylbenzene	EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values  STEL: 884 mg/m³ 15 minutes.  STEL: 200 ppm 15 minutes.

: 1-10-2022 Date of issue/Date of revision Version : 1

Date of previous issue : No previous validation 5/14

# Section 8. Exposure controls/personal protection

TWA: 442 mg/m<sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.

# Appropriate engineering controls

: 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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# Environmental exposure 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.

#### **Individual protection measures**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before

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.

**Eye/face 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.

#### Skin protection

**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.

Body 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.

Other skin protection : 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.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

# Section 9. Physical and chemical properties and safety characteristics

#### **Appearance**

Physical state : Liquid.
Color : Silver.

Odor : Characteristic.
Odor threshold : Not available.
pH : Not available.
Melting point/freezing point : Not available.

Date of issue/Date of revision :1-10-2022 Version :1

Date of previous issue : No previous validation 6/14 AkzoNobel

FRS-40 SEMI-GLOSS BASE STAR SILVER 42 PH3/7223

# Section 9. Physical and chemical properties and safety characteristics

Initial boiling point and

boiling range

: Not available.

Flash point : Closed cup: 28°C **Evaporation rate** : Not available. **Flammability** : Not available.

Lower and upper explosion

limit/flammability limit

: Greatest known range: Lower: 1.4% Upper: 7.6% (n-butyl acetate)

Vapor pressure

: Not available.

Relative vapor density

: Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate).

Weighted average: 4.02 (Air = 1)

Relative density

: Not available.

Solubility(ies)

: Insoluble in the following materials: cold water.

Partition coefficient: n-octanol/: Not available.

water

**Auto-ignition temperature Decomposition temperature**  : Not available. : Not available.

**Viscosity** 

: Kinematic (room temperature): 10.15 cm<sup>2</sup>/s

Kinematic (40°C): 1.01 cm<sup>2</sup>/s

**Explosive properties** Oxidizing properties Solubility in water

: Not available. : Not available.

: Not available.

# Section 10. Stability and reactivity

Reactivity

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

**Chemical stability** 

: The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid

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

Incompatible materials

: Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

# **Section 11. Toxicological information**

Information on toxicological effects

**Acute toxicity** 

Date of issue/Date of revision : 1-10-2022 Version

**AkzoNobel** Date of previous issue : No previous validation 7/14

# **Section 11. Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
	LC50 Inhalation Vapor	Mouse	6 g/m³	2 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Intraperitoneal	Mouse	1230 mg/kg	-
	LD50 Oral	Guinea pig	4700 mg/kg	-
	LD50 Oral	Mouse	6 g/kg	-
	LD50 Oral	Rabbit	3200 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Gas.	Rat	6670 ppm	4 hours
	LD50 Intraperitoneal	Mouse	1548 mg/kg	-
	LD50 Intraperitoneal	Mouse	1548 mg/kg	-
	LD50 Intraperitoneal	Rat	2459 mg/kg	-
	LD50 Oral	Mouse	2119 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Subcutaneous	Rat	1700 mg/kg	-
4-methylpentan-2-one	LD50 Intraperitoneal	Guinea pig	800 mg/kg	-
	LD50 Intraperitoneal	Mouse	268 mg/kg	-
	LD50 Intraperitoneal	Rat	400 mg/kg	-
	LD50 Oral	Guinea pig	1600 mg/kg	-
	LD50 Oral	Mouse	1900 mg/kg	-
	LD50 Oral	Mouse	2850 mg/kg	-
	LD50 Oral	Rat	2080 mg/kg	-
	LD50 Oral	Rat	4600 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
	LC50 Inhalation Vapor	Mouse	35500 mg/m <sup>3</sup>	2 hours
	LC50 Inhalation Vapor	Rat	55000 mg/m <sup>3</sup>	2 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Dermal	Rabbit	17800 uL/kg	-
	LD50 Intraperitoneal	Mouse	2624 uL/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Vapor	Rat	8500 mg/m³	4 hours
Tryal off outour floary	LD50 Oral	Rat	>6 g/kg	-

## **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
_	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Moderate irritant	Rabbit	-	100 %	-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				UI	
	Eyes - Severe irritant	Rabbit	-	40 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	

## **Sensitization**

 Date of issue/Date of revision
 : 1-10-2022
 Version
 : 1

 Date of previous issue
 : No previous validation
 8/14
 AkzoNobel

# **Section 11. Toxicological information**

Not available.

#### **Mutagenicity**

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
n-butyl acetate 2-methoxy-1-methylethyl acetate xylene	Category 3 Category 3 Category 3	-	Narcotic effects Narcotic effects Respiratory tract
4-methylpentan-2-one Naphtha (petroleum), hydrotreated heavy	Category 3 Category 3 Category 3	- - -	irritation Narcotic effects Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

#### **Aspiration hazard**

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Not available.

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

**Skin contact**: Causes skin irritation.

**Ingestion** : Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Date of issue/Date of revision : 1-10-2022 Version : 1

Date of previous issue : No previous validation 9/14 AkzoNobel

## **Section 11. Toxicological information**

**Skin contact**: Adverse symptoms may include the following:

irritation redness

**Ingestion**: No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity : No known significant effects or critical hazards.Reproductive toxicity : No known significant effects or critical hazards.

# **Section 12. Ecological information**

## **Toxicity**

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
-	Acute LC50 100000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 185000 µg/l Marine water	Fish - Menidia beryllina	96 hours
	Acute LC50 62000 µg/l Fresh water	Fish - Danio rerio	96 hours
xylene	Acute EC50 90 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute LC50 8.5 ppm Marine water	Crustaceans - Palaemonetes pugio - Adult	48 hours
	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 15700 μg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 20870 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 19000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 13400 μg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 16940 μg/l Fresh water	Fish - Carassius auratus	96 hours
4-methylpentan-2-one	Acute LC50 505000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 540000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 537000 μg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days

Date of issue/Date of revision: 1-10-2022Version: 1Date of previous issue: No previous validation10/14

14 AkzoNobel

# **Section 12. Ecological information**

ethylbenzene	Acute EC50 4900 µg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 4600 μg/l Fresh water	Algae - Pseudokirchneriella	72 hours
		subcapitata	
	Acute EC50 5400 µg/l Fresh water	Algae - Pseudokirchneriella	72 hours
		subcapitata	
	Acute EC50 3600 μg/l Fresh water	Algae - Pseudokirchneriella	96 hours
	===== "	subcapitata	40.1
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp	48 hours
	A	Nauplii	40.1
	Acute EC50 13.3 mg/l Marine water	Crustaceans - Artemia sp	48 hours
	Acute EC50 2.97 mg/l Fresh water	Nauplii Daphnia - Daphnia magna -	48 hours
	Acute EC30 2.97 High Fresh water	Neonate	40 110015
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
	, toute 2000 2:00 mg/m room mater	Neonate	10 110410
	Acute LC50 8.78 mg/l Marine water	Crustaceans - Artemia sp	48 hours
		Nauplii	
	Acute LC50 13.3 mg/l Marine water	Crustaceans - Artemia sp	48 hours
		Nauplii	
	Acute LC50 40000 µg/l Marine water	Crustaceans - Cancer magister -	48 hours
		Zoea	
	Acute LC50 18.4 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
	Acute LC50 13.9 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 75000 μg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5100 µg/l Marine water	Fish - Menidia menidia	96 hours
	Acute LC50 9090 μg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 9100 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 4.3 ul/L Marine water	Fish - Morone saxatilis -	96 hours
		Juvenile (Fledgling, Hatchling,	
		Weanling)	

## Persistence and degradability

Not available.

## **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
2-methoxy-1-methylethyl	1.2	-	low
acetate			
xylene	3.12	8.1 to 25.9	low
4-methylpentan-2-one	1.9	-	low
ethylbenzene	3.6	-	low
Naphtha (petroleum), hydrotreated heavy	-	10 to 2500	high

## **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

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

 Date of issue/Date of revision
 : 1-10-2022
 Version
 : 1

 Date of previous issue
 : No previous validation
 11/14
 AkzoNobel

# Section 13. Disposal considerations

#### Disposal methods

: 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. 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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

# **Section 14. Transport information**

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

#### **Additional information**

UN

: Viscous liquid exception This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.1.

**IMDG** : Emergency schedules F-E, S-E

Viscous liquid exception This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

Special precautions for user : 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.

Transport in bulk according : Not available. to IMO instruments

# Section 15. Regulatory information

#### Inventory list

**Australia** : At least one component is not listed.

Canada : Not determined. China : Not determined. : Not determined. **Europe** 

Japan : Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.

: 1-10-2022 Date of issue/Date of revision Version : 1

**AkzoNobel** Date of previous issue : No previous validation 12/14

FRS-40 SEMI-GLOSS BASE STAR SILVER 42 PH3/7223

# **Section 15. Regulatory information**

**New Zealand** : Not determined. **Philippines** : Not determined. Republic of Korea : Not determined. **Taiwan** : Not determined. **Thailand** : Not determined. **Turkey** : Not determined. **United States** : Not determined. : Not determined. **Viet Nam** 

## Section 16. Other information

**History** 

Date of printing : 3 October 2022

Date of issue/ Date of : 1 October 2022

revision

Date of previous issue : No previous validation

Version : 1

**Key to abbreviations** : ATE = Acute Toxicity Estimate

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)

N/A = Not available SGG = Segregation Group UN = United Nations

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	

References : Not available.

▼ Indicates information that has changed from previously issued version.

#### Notice to reader

#### FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

Date of issue/Date of revision : 1-10-2022 Version : 1

Date of previous issue : No previous validation 13/14 AkzoNobel

FRS-40 SEMI-GLOSS BASE STAR SILVER 42 PH3/7223

# **Section 16. Other information**

Brand names mentioned in this data sheet are trademarks of or are licensed to Akzo Nobel.

Date of issue/Date of revision : 1-10-2022 Version : 1

Date of previous issue : No previous validation 14/14 AkzoNobel