



Section 1. Identification

Product name : Baltoflake FC

Product code : 26160
Product description : Paint.
Product type : Liquid.

Other means of identification

: Not available.

Supplier's details : Jotun Paints Co LLC,

P.O.Box 672-C.P.O, Postal Code - 111 Sultanate of Oman Tel: 00968-626100 Fax:00968-626105 SDSJotun@jotun.com

Emergency telephone

number

: SHE Dept. Jotun AS, Norway

+47 33 45 70 00

Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

REPRODUCTIVE TOXICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

GHS label elements

Hazard pictograms







Signal word : Danger.

Hazard statements : H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H361 - Suspected of damaging fertility or the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure.

(hearing organs)

Precautionary statements

Prevention: P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P260 - Do not breathe vapour.

P270 - Do not eat, drink or smoke when using this product.

Date of issue/Date of revision : 29.12.2021 Date of previous issue : No previous validation Version : 1 1/10

Section 2. Hazards identification

: P308 + P313 - IF exposed or concerned: Get medical advice or attention. Response

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - 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 Other means of

identification

: Mixture : Not available.

CAS number/other identifiers

CAS number : Not applicable.

EC number : Mixture. **Product code** 26160

Ingredient name	%	CAS number
styrene	≥25 - ≤50	100-42-5

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 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 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.

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. 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

Date of issue/Date of revision : 29.12.2021 Version :1 2/10 Date of previous issue : No previous validation

Section 4. First aid measures

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing

media

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

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapour. 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.

Date of issue/Date of revision : 29.12.2021 Date of previous issue : No previous validation Version : 1 3/10

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 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 emergency responders:

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".

Environmental precautions

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).

Methods and material 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 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.

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. 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.

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 oxidising 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. See Section 10 for incompatible materials

Date of issue/Date of revision : 29.12.2021 Date of previous issue Version :1 4/10 : No previous validation

Section 7. Handling and storage

before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
styrene	ACGIH TLV (United States, 1/2021). Ototoxicant. STEL: 20 ppm 15 minutes. TWA: 10 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, vapour 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 to EN 166 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

: There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Wear suitable gloves tested to EN374.

Recommended, gloves(breakthrough time) > 8 hours: Teflon, polyvinyl alcohol (PVA), Responder

May be used, gloves(breakthrough time) 4 - 8 hours: Viton®, 4H, Barricade, CPF 3, Trellchen HPS, nitrile rubber, neoprene, PVC

Not recommended, gloves(breakthrough time) < 1 hour: butyl rubber, PE, Saranex

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.

Date of issue/Date of revision : 29.12.2021 Date of previous issue : No previous validation Version : 1 5/10

Section 8. Exposure controls/personal protection

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

: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Black, MCI Base 3, Orange, White., Yellow.

Odour Characteristic. **Odour threshold** : Not applicable. pH : Not applicable. **Melting point** : Not applicable.

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

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

: 0.536 (styrene) compared with butyl acetate **Evaporation rate**

: Not applicable. Flammability (solid, gas) : 0.9 - 6.8% Lower and upper explosive

(flammable) limits

Vapour pressure : Highest known value: 0.9 kPa (6.4 mm Hg) (at 20°C) (styrene).

Vapour density : Highest known value: 3.6 (Air = 1) (styrene).

Density : 1.25 g/cm³

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Lowest known value: 490°C (914°F) (styrene).

Not available. **Decomposition temperature**

Viscosity : Kinematic (40°C): >0.205 cm²/s (>20.5 cSt)

Section 10. Stability and reactivity

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

Chemical stability The product is stable.

Possibility of hazardous

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

Conditions to avoid 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.

: Reactive or incompatible with the following materials: **Incompatible materials**

oxidising materials

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

should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
styrene	LC50 Inhalation Vapour	Rat	11800 mg/m³	4 hours

Irritation/Corrosion

Date of issue/Date of revision : 29.12.2021 6/10 Version: 1 Date of previous issue : No previous validation

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
styrene	Eyes - Moderate irritant	Rabbit		24 hours 100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Baltoflake FC (MM-WCS)	Category 1	-	hearing organs
styrene	Category 1	-	hearing organs

Aspiration hazard

Not available.

Information on likely routes

of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced foetal weight increase in foetal deaths skeletal malformations

Date of issue/Date of revision : 29.12.2021 Date of previous issue : No previous validation Version : 1 7/10

Section 11. Toxicological information

Ingestion : Adverse symptoms may include the following:

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

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 : Causes damage to organs through prolonged or repeated exposure.

Carcinogenicity: No known significant effects or critical hazards.
 Mutagenicity: No known significant effects or critical hazards.
 Teratogenicity: Suspected of damaging the unborn child.
 Developmental effects: No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (vapours)	33.52 mg/l

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
styrene	0.35	13.49	low

Mobility in soil

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

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

Date of issue/Date of revision: 29.12.2021Date of previous issue: No previous validationVersion: 18/10

Section 13. Disposal considerations

Disposal methods

: 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 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. 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.

Section 14. Transport information

	ADR/RID	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	-	Emergency schedules F-E, S-E	-

Additional information

ADR/RID

: ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity).

Hazard identification number 30

Tunnel code (D/E)

IMDG

: IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles < 450 litre capacity).

Emergency schedules F-E, S-E

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

Date of issue/Date of revision : 29.12.2021 Version:1 9/10 Date of previous issue : No previous validation

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product

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

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

History

Date of printing : 29.12.2021

Date of issue/Date of : 29.12.2021

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)

UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

Date of issue/Date of revision : 29.12.2021 Date of previous issue : No previous validation Version : 1 10/10