GRANTIZE AVIATION INTERNATIONAL

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation

X-20/15, X-20/18

of the mixture

Registration number

Synonyms None.

Issue date 23-July-2015

Version number 02

Revision date 09-February-2017 Supersedes date 23-July-2015

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified usesIndustrial use.Uses advised againstNone known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Granitize Aviation
Address 11022 Vulcan Street

South Gate, CA 90280-0893

United States

Division

Telephone Telephone: (562) 923-5438

e-mail Not available.

Contact person Not available.

1.4. Emergency telephone

CHEMTREC: (800) 424-9300

number

CHEMTREC International: 00 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable liquids Category 3 H226 - Flammable liquid and

vapour.

Health hazards

Skin corrosion/irritation Category 2 H315 - Causes skin irritation.

Specific target organ toxicity - single Category 3 narcotic effects exposure

egory 3 narcotic effects

H336 - May cause drowsiness or

dizziness.

Specific target organ toxicity - repeated

exposure

Category 1 (central nervous system) H372 - Causes damage to organs

(central nervous system) through prolonged or repeated exposure.

Aspiration hazard Category 1 H304 - May be fatal if swallowed

and enters airways.

Environmental hazards

Hazardous to the aquatic environment, Category 2 H411 - Toxic to aquatic life with

long-term aquatic hazard long lasting effects.

Hazard summary May be ignited by heat, sparks or flames. May be fatal if swallowed and enters airways. Causes

damage to organs through prolonged or repeated exposure. May cause drowsiness and dizziness. Causes skin irritation. Dangerous for the environment if discharged into watercourses.

Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Solvent Naphta (petroleum), Light Aromatic, Stoddard solvent

X-20/15, X-20/18 SDS EU

Hazard pictograms



| Signal word | Danger |
|-------------|--------|
|-------------|--------|

Hazard statements

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs (central nervous system) through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe mist or vapour.
P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

P331 Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P370 + P378 In case of fire: Use alcohol resistant foam, dry chemical powder, carbon dioxide for extinction.

P391 Collect spillage.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up. P235 Keep cool.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | • | % CAS | No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|--------------------------------------|--|-------|------------------------|---|--------------|-------|
| Stoddard solvent | 60 | | 3052-41-3 232-489-3 | - | 649-345-00-4 | |
| Classification: | Flam. Liq. 3;H226 1;H372, Aquatic 0 | , I | | rit. 2;H315, STOT SE 3;H33 | 36, STOT RE | |
| Solvent Naphta (petroleu Aromatic | m), Light 9 | | 4742-95-6 :65-199-0 | - | 649-356-00-4 | |
| Classification: | | | | rit. 2;H315, STOT SE 3;H33 quatic Chronic 2;H411 | 36, Muta. | Р |
| 1,2,4-Trimethyl benzene | 3,2 | .,. | 95-63-6 02-436-9 | - | 601-043-00-3 | # |
| Classification: | Flam. Liq. 3;H226 3;H335, Aquatic 0 | | | it. 2;H319, Acute Tox. 4;H33 | 32, STOT SE | |

X-20/15, X-20/18 SDS EU

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the

label where possible). Ensure that medical personnel are aware of the material(s) involved, and

take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTRE or doctor/physician if you feel unwell.

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation Skin contact

occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed

Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioural changes. Decrease in motor functions. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects. Causes damage to organs (central nervous system) through prolonged or repeated exposure.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Flammable liquid and vapour.

5.1. Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

5.3. Advice for firefighters

Special protective equipment for firefighters

so without risk.

Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

X-20/15, X-20/18 SDS EU

6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see section 10 of the SDS).

Value

500 mg/m3

7.3. Specific end use(s)

Industrial use.

Type

ΜΔΚ

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

X-20/15 X-20/18 (CAS

Austria. MAK List

Material

| X-20/15, X-20/18 (CAS Mixture) | MAK | 500 mg/m3 | |
|--|------|------------|--|
| | | 200 ppm | |
| | STEL | 2000 mg/m3 | |
| | | 800 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | MAK | 100 mg/m3 | |
| | | 20 ppm | |
| | STEL | 150 mg/m3 | |
| | | 30 ppm | |
| Belgium. Exposure Limit Values. | | | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS Mixture) | STEL | 1000 mg/m3 | |
| | | 400 ppm | |
| | TWA | 500 mg/m3 | |
| | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |
| Stoddard solvent (CAS 8052-41-3) | TWA | 533 mg/m3 | |
| , | | 100 ppm | |
| | | | |

X-20/15, X-20/18 SDS EU

| Material | Туре | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 1225 mg/m3 | |
| | TWA | 980 mg/m3 | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| , | | 20 ppm | |

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

| Material | Type | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | MAC | 999 mg/m3 | |
| | | 400 ppm | |
| | STEL | 1250 mg/m3 | |
| | | 500 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | MAC | 100 mg/m3 | |
| , | | 20 ppm | |

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

| Material | Туре | Value | |
|-----------------------------------|------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | TWA | 980 mg/m3 | |
| | | 400 ppm | |

Czech Republic. OELs. Government Decree 361

| Material | Туре | Value | |
|--|---------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | Ceiling | 1000 mg/m3 | |
| | TWA | 500 mg/m3 | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | Ceiling | 250 mg/m3 | |
| , | TWA | 100 mg/m3 | |

Denmark. Exposure Limit Values

| Material | Туре | Value | |
|--|------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | TLV | 490 mg/m3 | |
| , | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TLV | 100 mg/m3 | |
| , | | 20 ppm | |
| Stoddard solvent (CAS 8052-41-3) | TLV | 145 mg/m3 | |
| , | | 25 ppm | |

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

| Material | Туре | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 600 mg/m3 | |
| | | 250 ppm | |
| | TWA | 350 mg/m3 | |
| | | 150 ppm | |
| Components | Туре | Value Form | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

| Components | Туре | Value | Form |
|---|-----------------------------|--------------------------------|-------------------------|
| Solvent Naphta (petroleum), Light Aromatic (CAS | TWA | 1 mg/m3 | Vapour. |
| 64742-95-6) Stoddard solvent (CAS 8052-41-3) | STEL | 600 mg/m3 | |
| 3032-41-3) | | 100 ppm | |
| | TWA | 300 mg/m3 50 ppm | |
| Finland. Workplace Exposure Limi | its | | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS Mixture) | STEL | 620 mg/m3 | |
| , | | 250 ppm | |
| | TWA | 500 mg/m3 | |
| 0 | T | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | TWA | 20 ppm 100 mg/m3 | |
| France. Threshold Limit Values (V | LEP) for Occupational Expos | ure to Chemicals in France, IN | IRS ED 984 |
| Material | Type | Value | |
| X-20/15, X-20/18 (CAS Mixture) | VLE | 980 mg/m3 | |
| | | 400 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | VLE | 250 mg/m3 | |
| | \/h 4 \(\) | 50 ppm | |
| | VME | 100 mg/m3 20 ppm | |
| Germany. DFG MAK List (advisory in the Work Area (DFG) | OELs). Commission for the | • • | s of Chemical Compounds |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS Mixture) | TWA | 500 mg/m3 | |
| winter c) | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| , | | 20 ppm | |
| Germany. TRGS 900, Limit Values | | rkplace | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS Mixture) | AGW | 500 mg/m3 | |
| 0 | T | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene | AGW | 100 mg/m3 | |
| (CAS 95-63-6) | | 22 | |
| (CAS 95-63-6) | , as amended) | 20 ppm | |
| (CAS 95-63-6) Greece. OELs (Decree No. 90/1999 | • | | |
| (CAS 95-63-6) Greece. OELs (Decree No. 90/1999 Material | Туре | Value | |
| (CAS 95-63-6) Greece. OELs (Decree No. 90/1999 | • | | |

Greece. OELs (Decree No. 90/1999, as amended)

| Material | Туре | Value | |
|--|-------------------------------|-------------------------|--|
| | TWA | 980 mg/m3 | |
| | | 400 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 125 mg/m3 | |
| | | 25 ppm | |
| Stoddard solvent (CAS | STEL | 720 mg/m3 | |
| 3052-41-3) | | 125 ppm | |
| | TWA | 575 mg/m3 | |
| | | 100 ppm | |
| Hungary. OELs. Joint Decree on | Chemical Safety of Workplace | 3 | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS | STEL | 2000 mg/m3 | |
| Mixture) | T\A/A | F00 / 0 | |
| Components | TWA | 500 mg/m3 | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| Iceland. OELs. Regulation 154/19 | 99 on occupational exposure I | imits | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS Mixture) | TWA | 490 mg/m3 | |
| viixture) | | 200 ppm | |
| Components | Type | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| , | | 20 ppm | |
| Stoddard solvent (CAS 8052-41-3) | TWA | 145 mg/m3 | |
| 3302 11 3) | | 25 ppm | |
| reland. Occupational Exposure I | imits | | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS | STEL | 400 ppm | |
| Mixture) | TWA | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene | TWA | 100 mg/m3 | |
| (CAS 95-63-6) | | 20 ppm | |
| Stoddard solvent (CAS | TWA | 573 mg/m3 | |
| 8052-41-3) | | - | |
| Italy. OELs | | 100 ppm | |
| Material | Туре | Value | |
| X-20/15, X-20/18 (CAS | STEL | 400 ppm | |
| Mixture) | TWA | 200 nnm | |
| Components | Type | 200 ppm Value | |
| <u>-</u> | | | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| 0 | T14/4 | 20 ppm | |
| Stoddard solvent (CAS | TWA | 100 ppm | |

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

| Material | Туре | Value | |
|---|------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 600 mg/m3 | |
| | TWA | 350 mg/m3 | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | TWA | 10 mg/m3 | |

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

| Material | Туре | Value | |
|--|------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 600 mg/m3 | |
| , | | 250 ppm | |
| | TWA | 350 mg/m3 | |
| | | 150 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| · | | 20 ppm | |

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

| Components | Туре | Value | |
|--|------|-----------|--|
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| (======= | | 20 ppm | |

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

| Components | Туре | Value | |
|--|------|-----------|--|
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| (, | | 20 ppm | |

Netherlands. OELs (binding)

| Components | Type | Value | |
|--|------|-----------|--|
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | STEL | 200 mg/m3 | |
| (6/16/30/00/0) | TWA | 100 ma/m3 | |

Norway. Administrative Norms for Contaminants in the Workplace

| Material | Туре | Value | |
|--|------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | TLV | 245 mg/m3 | |
| | | 100 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TLV | 100 mg/m3 | |
| | | 20 ppm | |

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1

| Material | Туре | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 1200 mg/m3 | |
| | TWA | 900 mg/m3 | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | STEL | 170 mg/m3 | |
| | TWA | 100 mg/m3 | |

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1

| Components | Туре | Value | |
|---|------|------------|--|
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | STEL | 1500 mg/m3 | |
| | TWA | 500 mg/m3 | |
| Stoddard solvent (CAS 8052-41-3) | STEL | 900 mg/m3 | |
| · | TWA | 300 mg/m3 | |

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

| Components | Туре | Value | |
|--|------|-----------|--|
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| (| | 20 nnm | |

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

| Material | Туре | Value | |
|---|------|---------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 400 ppm | |
| | TWA | 200 ppm | |
| Components | Type | Value | |
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | TWA | 400 ppm | |
| Stoddard solvent (CAS 8052-41-3) | TWA | 100 ppm | |

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

| Material | Туре | Value | |
|---|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 500 mg/m3 | |
| | | 203 ppm | |
| | TWA | 200 mg/m3 | |
| | | 81 ppm | |
| Components | Type | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | STEL | 200 mg/m3 | |
| | TWA | 100 mg/m3 | |
| Stoddard solvent (CAS 8052-41-3) | STEL | 1000 mg/m3 | |
| | TWA | 700 mg/m3 | |

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

| Material | Туре | Value | |
|--|------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | TWA | 500 mg/m3 | |
| , | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |
| Stoddard solvent (CAS 8052-41-3) | TWA | 300 mg/m3 | |
| , | | 50 ppm | |

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

| Components | Туре | Value | |
|----------------------------------|------|-----------|--|
| Stoddard solvent (CAS 8052-41-3) | STEL | 600 mg/m3 | |

| Components | Туре | Value |
|------------|------|---------|
| | | 100 ppm |

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

| Material | Туре | Value | |
|---|------|-----------|--|
| X-20/15, X-20/18 (CAS | TWA | 500 mg/m3 | |
| Mixture) | | | |
| | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |
| Spain. Occupational Exposure Lim | its | | |

| Material | Туре | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 1000 mg/m3 | |
| , | | 400 ppm | |
| | TWA | 500 mg/m3 | |
| | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| | | 20 ppm | |

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

| Material | Туре | Value | |
|--|-----------------|-----------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 600 mg/m3 | |
| | | 250 ppm | |
| | TWA | 350 mg/m3 | |
| | | 150 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | STEL | 170 mg/m3 | |
| | | 35 ppm | |
| | TWA | 120 mg/m3 | |
| | | 25 ppm | |
| Stoddard solvent (CAS 8052-41-3) | STEL | 300 mg/m3 | |
| · | | 50 ppm | |
| | TWA | 150 mg/m3 | |
| | | 25 ppm | |
| Switzerland. SUVA Grenzwerte a | ım Arbeitsplatz | | |
| | _ | | |

| Material | Туре | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 1000 mg/m3 | |
| • | | 400 ppm | |
| | TWA | 500 mg/m3 | |
| | | 200 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | STEL | 200 mg/m3 | |
| , | | 40 ppm | |
| | TWA | 100 mg/m3 | |
| | | 20 ppm | |

Switzerland. SUVA Grenzwerte am Arbeitsplatz

| Components | Туре | Value | |
|---|------|------------|--|
| Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6) | TWA | 1100 mg/m3 | |
| | | 300 ppm | |

UK. EH40 Workplace Exposure Limits (WELs)

| Material | Туре | Value | |
|--|------|------------|--|
| X-20/15, X-20/18 (CAS Mixture) | STEL | 1250 mg/m3 | |
| , | | 500 ppm | |
| | TWA | 999 mg/m3 | |
| | | 400 ppm | |
| Components | Туре | Value | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 125 mg/m3 | |
| , | | 25 ppm | |

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

| Components | Туре | Value | |
|--|------|-----------|--|
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | TWA | 100 mg/m3 | |
| (3.13.33.37.37 | | 20 ppm | |

Biological limit values

Germany. TRGS 903, BAT List (Biological Limit Values)

| Material | Value | Determinant | Specimen | Sampling time | |
|--|----------|---|------------------------|---------------|--|
| X-20/15, X-20/18 (CAS Mixture) | 50 mg/l | Aceton | Blood | * | |
| , | 50 mg/l | Aceton | Urine | * | |
| Components | Value | Determinant | Specimen | Sampling time | |
| 1,2,4-Trimethyl benzene (CAS 95-63-6) | 400 mg/g | Dimethylbenzo esäuren (Summe aller Isomeren nach Hydrolyse) | Creatinine in urine | * | |

^{* -} For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

| Material | Value | Determinant | Specimen | Sampling time |
|-----------------------------------|-------|---|--|---------------|
| X-20/15, X-20/18 (CAS Mixture) | 25 % | red blood cell or total blood acetylcholinest erase activity (EC. 3.1.1.7.) | Reduction from individual baseline activity in red blood cells | * |

^{* -} For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

| Material | Value | Determinant | Specimen | Sampling time | |
|-----------------------|---------|-------------|----------|---------------|--|
| X-20/15, X-20/18 (CAS | 40 mg/l | Acetona | Urine | * | |
| Mixture) | | | | | |

^{* -} For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

| Material | Value | Specimen | Sampling time | |
|-----------------------------------|---------|----------|---------------|--|
| X-20/15, X-20/18 (CAS Mixture) | 25 mg/l | Urine | * | |
| , | 25 mg/l | Blood | * | |

^{* -} For sampling details, please see the source document.

Recommended monitoring Follow standard monitoring procedures. **procedures**

Derived no effect levels

(DNELs)

Not available.

Predicted no effect concentrations (PNFCs

Not available.

concentrations (PNECs)

8.2. Exposure controls

Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

according to the CEN standards and in discussion with the supplier of the personal protective

equipment.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing. Use of an impervious apron is recommended.

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Provide easy access to water supply or

an emergency shower.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures When using do not smoke. Always observe good personal hygiene measures, such as washing

after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

Environmental exposure

controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Colourless liquid.

Physical state Liquid.
Form Liquid.
Colour Colourless.
Odour Slight.

Odour threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling

range

157,22 - 198,89 °C (315 - 390 °F)

Flash point 60,0 °C (140,0 °F) Tag closed cup

Evaporation rateNot available.Flammability (solid, gas)Not applicable.Vapour pressure1,8 (68 °F)Vapour density4,9 (Air= 1)Relative density0,78 (Water = 1)

Solubility(ies) Slightly soluble in water.

Partition coefficient

(n-octanol/water)

Not available.

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.Explosive propertiesNot explosive.Oxidising propertiesNot oxidising.

9.2. Other information

VOC 774 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous

decomposition products

Thermal decomposition of this product can generate carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

Occupational exposure to the substance or mixture may cause adverse effects. General information

Information on likely routes of exposure

May cause damage to organs through prolonged or repeated exposure by inhalation. May cause Inhalation

drowsiness and dizziness. Headache. Nausea, vomiting.

Skin contact Causes skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious Ingestion

chemical pneumonia.

Symptoms Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness.

> Narcosis. Headache. Nausea, vomiting. Behavioural changes. Decrease in motor functions. Skin irritation. May cause redness and pain. Causes damage to organs (central nervous system)

through prolonged or repeated exposure.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components **Species Test results**

1,2,4-Trimethyl benzene (CAS 95-63-6)

Acute

Dermal

LD50 Rabbit > 3160 mg/kg

Inhalation

LD50 Rat 18000 ppm, 4 hours

Oral

LD50 Rat 2720 - 3960 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory sensitisation Based on available data, the classification criteria are not met. Skin sensitisation Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6)

Stoddard solvent (CAS 8052-41-3)

IARC Monographs. Overall Evaluation of Carcinogenicity

Stoddard solvent (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Causes damage to organs (central nervous system) through prolonged or repeated exposure.

May be fatal if swallowed and enters airways. **Aspiration hazard**

Mixture versus substance

information

No information available.

Other information Symptoms may be delayed.

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SECTION 12: Ecological information

Toxic to aquatic life with long lasting effects. 12.1. Toxicity

Test results Components Species

1,2,4-Trimethyl benzene (CAS 95-63-6)

Aquatic

Acute

LC50 Fish Fathead minnow (Pimephales promelas) 7,72 mg/l, 96 hours

12.2. Persistence and

degradability

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Stoddard solvent (CAS 8052-41-3)

3.16 - 7.15

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil This product is slightly water soluble and may disperse in soil.

Not a PBT or vPvB substance or mixture. 12.5. Results of PBT

and vPvB assessment

The product contains volatile organic compounds which have a photochemical ozone creation 12.6. Other adverse effects

potential.

12.7. Additional information

Estonia Dangerous substances in groundwater Data

Stoddard solvent (CAS 8052-41-3) Pesticides (total) 0,5 UG/L

Pesticides (total) 5 UG/L

Estonia Dangerous substances in soil Data

Stoddard solvent (CAS 8052-41-3) Synthetic pesticides (total of active substances) 0,5 mg/kg

> Synthetic pesticides (total of active substances) 20 mg/kg Synthetic pesticides (total of active substances) 5 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

The Waste code should be assigned in discussion between the user, the producer and the waste EU waste code

disposal company.

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow Disposal methods/information

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Dispose in accordance with all applicable regulations. Special precautions

SECTION 14: Transport information

ADR

14.1. UN number UN1268

Petroleum distillates, n.o.s. 14.2. UN proper shipping

name

14.3. Transport hazard class(es)

3 Class Subsidiary risk 3 Label(s) 30 Hazard No. (ADR) D/E **Tunnel restriction code**

Ш 14.4. Packing group 14.5. Environmental hazards Yes

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

RID

UN1268 14.1. UN number

X-20/15, X-20/18 SDS EU 14 / 17

14.2. UN proper shipping Petroleum distillates, n.o.s. name 14.3. Transport hazard class(es) Class Subsidiary risk 3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards Yes Read safety instructions, SDS and emergency procedures before handling. 14.6. Special precautions for user **ADN** 14.1. UN number UN1268 14.2. UN proper shipping Petroleum distillates, n.o.s. 14.3. Transport hazard class(es) 3 Class Subsidiary risk 3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards Yes 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user **IATA** UN1268 14.1. UN number 14.2. UN proper shipping Petroleum distillates, n.o.s. name 14.3. Transport hazard class(es) Class 3 Subsidiary risk 3 Label(s) Ш 14.4. Packing group 14.5. Environmental hazards Yes **ERG Code** 14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling. for user **IMDG** 14.1. UN number UN1268 14.2. UN proper shipping Petroleum distillates, n.o.s. name 14.3. Transport hazard class(es) 3 Class Subsidiary risk Ш 14.4. Packing group 14.5. Environmental hazards Marine pollutant Yes **EmS** F-E, S-E Read safety instructions, SDS and emergency procedures before handling. 14.6. Special precautions for user 14.7. Transport in bulk Not applicable.

SECTION 15: Regulatory information

according to Annex II of Marpol

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

EU regulations

and the IBC Code

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

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Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6)

Stoddard solvent (CAS 8052-41-3)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Solvent Naphta (petroleum), Light Aromatic (CAS 64742-95-6)

Stoddard solvent (CAS 8052-41-3)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

1,2,4-Trimethyl benzene (CAS 95-63-6)

Other regulations The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP

Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation

(EC) No 1907/2006, as amended.

National regulations Follow national regulation for work with chemical agents. Young people under 18 years old are not

allowed to work with this product according to EU Directive 94/33/EC on the protection of young

people at work, as amended.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

LC50: Lethal Concentration, 50%.

LD50: Lethal Dose, 50%.
TWA: Time weighted average.
STEL: Short term exposure limit.
MAC: Maximum Allowed Concentration

VLE: Exposure Limit Value VME: Exposure Average Value

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

TLV: Threshold Limit Value.

References ECHA C&L Inventory database GESTIS Substance Database

RTECS (2010)

ESIS (European chemical Substances Information System)

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation

methods and test data, if available.

Full text of any H-statements not written out in full under

Sections 2 to 15

H224 Extremely flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H340 May cause genetic defects.

H350 May cause cancer.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Training information Disclaimer

Follow training instructions when handling this material.

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